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AUTHOR	Edgar, Eugene
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ABSTRACT

This final report summarizes findings of the First Decade Project, which examined factors related to the successful transition from school to adult life for youth with disabilities. Subjects were two cohorts of graduates from 1985 and 1990, including all special education graduates (N=488) and randomly selected nondisabled graduates (N=610) from three school districts. A full 5 years of data on employment, income, postsecondary schooling, marital status, and living arrangement were collected on 299 special education students and 315 nondisabled students. Additionally, in-depth case studies were conducted on 26 graduates from the 1985 cohort. Major findings included: (1) males with learning disabilities were employed at almost the same rate, and in as well-paying jobs, as the nondisabled males; (2) females with learning disabilities were parenting at twice the rate of nondisabled females and many were single mothers on welfare; and (3) nondisabled subjects attended and graduated from college programs at a significantly higher rate than any sub-group of graduates with disabilities, who tended to attend vocational and other non-college postsecondary programs. The bulk of the document consists of appendixes providing additional project detail or products. These include: questionnaires, cohort summaries by disability, summaries by school district, a sample case study, and published and unpublished reports detailing the study's findings and methodology. (DB)

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First Decade After Graduation

Final Report

H023C00079

December 1995

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Eugene Edgar
Principal Investigator
University of Washington
Seattle, Washington

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First Decade After Graduation
Executive Summary
December 1995

The major goals of the First Decade Project were: 1) to determine factors related to the successful transition from school to adult life for youth with disabilities and 2) to make recommendations for improving the secondary special education programs and adult services.

The subjects were two cohorts of graduates from 1985 and 1990, including all special education graduates (N = 488) and a group of randomly selected non disabled graduates (N= 610) from three school districts in the Pacific Northwest. Five years of data were collected (Final N's were 299 for the special education group and 315 for the non disabled group). These data included information on employment, income, post-secondary schooling, marital status, and living arrangement.

In addition, 26 graduates from the 1985 cohort were the subjects for in-depth case studies which consisted of face-to-face interviews with the subjects and with other critical people in their lives, as well as an extensive review of records.

* Although the non disabled group had higher employment rates than the entire group of special education graduates, males with learning disabilities were employed at almost the same rate, and in as well paying jobs, as the non disabled males.

* Females with learning disabilities were parenting at twice the rate than were non disabled females, and many of the females with learning disabilities were single mothers on welfare.

*The non disabled graduates attended and graduated from college programs at a significantly higher rate than any sub group of graduates with disabilities. Special education youth tended to attend vocational and other non college post-secondary education programs while the majority of non disabled graduated attended 4 year colleges.

We were unable to note any variables that affected the quality of the lives of the graduates other than the negative effects of single parenting on females.

* Future studies need to focus on the direct connection of high school programs and graduate outcomes.

* School districts might want to collect follow-up data on their graduates (and drop outs) in order to reflect on their program and make changes that relate to the type of students they serve and the specific issues in their community. Large scale follow-up studies conducted by third party evaluators probably have little to offer practitioners.

First Decade After Graduation
Final Report

I. Introduction and Purpose

Over the past twelve years the field of special education has been interested in the post-school status of special education graduates. In addition to the general interest of how graduates were doing as young adults, the field has been interested in finding clues that could be used to improve secondary programs, the transition services currently offered to special education youth as they graduate from high school and move into adulthood, and how best to support these youth as young adults in the community. The First Decade Project proposed to study two groups of special education graduates in both a quantitative manner and a qualitative manner. The quantitative data was to yield information on the common post-school status indicators (employment, graduation from college, living arrangement, marital status) for youth out of school for 10 years. The qualitative section was to provide information on factors related to successful transition to adulthood for these youth.

II. Goals and Objectives

The two overall goals of the First Decade Project were: 1) to determine how variables such as special education classification, socioeconomic status, and personal factors interact during the first 10 years after graduation and impact post-school outcome status markers, and 2) to suggest ways the key variables could be manipulated in secondary school programs, or by human services agencies, to significantly increase the likelihood of a special education graduate making a successful transition to an adult occupation and lifestyle.

From these goals, five research questions were generated.

1. Can we isolate variables that differentiate between successful and unsuccessful graduates?

1.1 Do graduates with different disabilities experience differential post-school outcomes during the first 10 years after graduation from high school?

1.2 Are there any differences by gender in post-school outcomes within disability category over 10 years post high school graduation?

1.3 Are there differences in post-school outcomes, within disability group, and within the total group, due to socioeconomic status of the graduate's family?

1.4 Is there an interaction effect of gender and SES, within disability category that is a significant predictor of post-school outcome?

1.5 Are there differences in the life experiences of successful and unsuccessful special education graduates?

2. Can patterns of successful and unsuccessful adjustment be determined?

3.0 Are the post-school outcomes of the graduate's sibling different from outcomes of special education graduates?

4.0 Who is the most reliable informant for reporting the post-school outcomes of high school graduates?

5.0 What measures of socioeconomic status is most sensitive in predicting post-school outcomes?

In order to answer the above research questions a series of 11 objectives were developed.

1. Interview the 1985 cohort over 5 years.
2. Interview the 1990 cohort over 5 years.
3. Conduct case studies of successful and unsuccessful graduates.
4. Conduct informant agreement analysis.
5. Conduct sibling analysis.
6. Conduct event analysis.
7. Conduct SES analysis.
8. Conduct gender analysis.
9. Perform STELLA analysis.
10. Conduct outcome by disabilities analysis.
11. Determine recommendations for secondary education and human services programs.

III. Results

Objectives

1. Interview the 1985 cohort over 5 years.

This data set consisted of all the special education graduates from three school districts (original N=283) and a random sample of non disabled graduates from the same school districts (original N=349). Computer-assisted telephone interviews with the graduate's parent or the graduate were conducted yearly (January through March). In Year 5 the contact rate was 54% for the special education cohort and 44% for the non disabled cohort. See Appendix 1 for the interview protocol. See Appendix 2 for the data summaries for year 5. Yearly summaries of these data were provided to the special education directors of the three districts. See Appendix 3 for a sample summary.

2. Interview the 1990 cohort over 5 years.

This data set consisted of all the special education graduates from three school districts (original N=205) and a random sample of non disabled graduates from the same school districts (original N=261). Computer assisted telephone interviews with the graduate's parent or the graduate were conducted yearly (January through March). The Year 5 contact rate was 72% for the special education cohort and 62% for the non disabled cohort. See Appendix 4 for the data summaries for year 5.

3. Conduct case studies of successful and unsuccessful graduates.

Twenty-six (26) graduates were selected for in-depth case studies. The selection process consisted of reviewing individual cases from the 1985 cohort during year 3 of the study and trying to find successful (employed and/or attending college) and unsuccessful (not employed nor attending college) cases. Only youth with the labels of learning disabled, mildly mentally retarded, or seriously behaviorally disorder were included in the analysis. Upon selection the principal investigator contacted the potential subject by telephone and explained the study to them, including a $100.00 honorarium for participation. If the subject was interested in participating a data collector contacted them, arranged for a face-to-face meeting, explained the study once again, and obtained formal informed consent to begin the study. Overall 35 subjects were contacted in order to obtain the 26 participants. The data collectors conducted at least three formal interviews of the subjects using a standard protocol, and determined other key individuals to interview (parents, friends, former teachers, employers, etc.). Consent was obtained from the subject and the other individuals interviewed. Also, the data collectors identified records (school transcripts, social services agency, police records) that should be reviewed, and obtained subject consent to access these records. During years 3 and 4 four data collectors conducted this portion of the study. Meetings between the principal investigator, the co-principal investigator and the data collectors occurred every three weeks during this time frame. At these meetings data were discussed, new leads were determined, and there were discussions as to maintaining consistency between the data collectors. During the latter portion of year 4 these meetings were used to develop codes for the data (all transcripts were entered into Ethnograph, a computer software for coding ethnographic data). The final case studies of the 26 subjects were developed at the end of year 4 and the beginning of year 5. These case studies were than analyzed during year 5 to determine trends among the successful and unsuccessful subjects.

This portion of the study experienced numerous problems. The determination of success and failure proved to be an elusive category, changing over time and seldom remaining stable for any one subject. The data analysis portion of this phase was severely limited by this factor. See Appendix 5 for a sample case study.

4. Conduct informant agreement analysis.

During year 1 of the study the graduates were contacted and interviewed after the primary informant had been interviewed. The interview of the graduate was identical to the interview completed by the primary informant. When discrepancies were noted between the responses provided by the graduate and the primary informant, the graduate was re-contacted and was told of the discrepancy and asked to explain the discrepancy. These data were than analyzed using Cohen's Kappa statistic. The results of this study were published in Exceptional Children in an article entitled "An Analysis of Respondent Agreement in Follow-up Studies of Graduates of Special and Regular Education Programs" (see Appendix 6).

Graduates are by far the most accurate informant of their post-school status. Parents tend to have accurate information on general information (employment, marital status, attendance of college programs), but are much less well informed as to specifics (salary level, benefits, progress in school). This finding becomes more of a critical factor as the youth matures, with parents of older subjects being less well informed than parents of more recent graduates. Parents of graduates with more severe disabilities (mental retardation) are more informed than parents of non disabled youth and youth with learning disabilities). Future follow-up studies need to use this finding to obtain the most accurate information on graduates.

5. Conduct sibling analysis.

During the second year of the study data were collected on the siblings of the subjects who did not have a disability and were high school graduates. These data were obtained from the primary informants. Data have been analyzed on the siblings of the non disabled and learning disabled graduates. The other categories of graduates did not have enough sibling data to conduct an analysis. This study is currently being written for submission to a journal. The general findings are that there are no significant differences in the post school status of the non disabled siblings and their disabled siblings except for attendance in college programs, with the non disabled siblings attending at a higher rate than disabled siblings. We were surprised with these data but believe this is an indication of how well learning disabled graduates are doing as young adults.

6. Conduct event analysis.

Data were analyzed in an event analysis but missing data from subjects proved to be so great an accurate analysis was not possible. Unfortunately we were unable to complete this analysis.

7. Conduct SES analysis.

During year 1 of the study the informants were requested to provide us with the family income data for the year the subject graduated from high school and to provide information on the number of individuals living in the household at that time. We also requested information on the employment status and name of the job of the mother and father (if living in the home) and the educational levels of the mother and father. These data were used to generate Hollingshead scores for each subject as well as Duncan Status ratings and to determine if the family was above or below the poverty level. These data were then used to determine if there were SES differences in the graduates by type of post school status. There were a high number of subjects with missing data as many informants chose not to share these data. When we conducted our analysis we noted that the available data were weighted in favor of the higher SES families with few families being in the lower SES ranges. We suspect this finding is due to the missing data (including the missing subjects from the overall data set). We were unable to find SES differences by post-school status outcome measures. However, we believe that finding is an artifact of our data collection rather than a finding of no impact of family SES.

8. Conduct gender analysis.

At the end of the second year of the study we analyzed the data for the youth with no disabilities, those with mild levels of retardation and those with learning disabilities to determine if there were outcome differences by gender. These findings were reported in the journal Exceptional Children under the title "An Analysis by Gender of Long-term Postschool Outcomes for Youth with and without Disabilities" (see Appendix 7). The findings of this study were that there were few significant differences by gender, but there were many significant differences between disability categories.

At the end of the study a similar analysis was performed and gender differences were noted, with females with learning disabilities doing much poorer than males with learning disabilities. On further analysis this difference seemed to be due to the high rate of parenting (much of it single parenting) among the women with learning disabilities. This paper is in the final stages of being submitted for publication (see Appendix 8).

9. Perform STELLA analysis.

STELLA, Structural Thinking Experimental Learning Laboratory Analysis, is a modeling program for research in the natural and social sciences that operates on the principals of system dynamics. The interactions of variables targeted in the qualitative study were to be used in connection with the outcome variables to determine relationships. The lack of specific variables found in the qualitative study negated the use of this analysis.

10. Conduct outcome by disabilities analysis.

All data have been analyzed by disability category. The low number of subjects in categories other than Learning Disabilities and non disabled graduated made standard analysis impossible. The data on graduates with learning disabilities and no disabilities has been analyzed (Appendix 8). An analysis of graduates with mental retardation is being conducted as part of a doctoral dissertation by Pat Brown. Data from youth with sensory impairments, physical disabilities, health impairments, and serious behavior disorders were included in the analysis of youth who had attended post-secondary education programs which is part of a dissertation by Steve Nourse and which an article is forthcoming.

The basic findings are that graduates with sensory impairments, physical disabilities, health impairments, and learning disabilities are doing comparatively as well as graduates without disabilities on employment and income measures. All special education youth attend and graduate from post-secondary education programs at significantly lower rates than their non disabled peers. Graduates with mental retardation do less well than their non disabled peers on all measures.

11. Determine recommendations for secondary education and human services programs.

There are fewer than anticipated recommendations from this study due to our inability to analyze the case study data. We do, however, have five major recommendations.

1. Future post-school follow-up studies need to focus on the correlation between high school program, student demographic characteristics, adult human services, and achieved outcomes. Without a detailed analysis of such factors, future studies will not advance the knowledge of the field. Ethnographic designs are probably called for in the future.

2. The most effective use of post-school data are by the program staff from which the youth attended. We have made this recommendation to the districts involved in this study. Large scale studies of the type conducted here provide scant information for program developers because of the lack of information about the secondary program and the individual student's experience in that program. Districts, if they reflected on

the data and knew the graduates intimately, could improve their practice by reflecting on these data.

3. Becoming a mother early, especially without gaining access to meaningful employment, is a very negative event for young women with disabilities. Women with learning disabilities, in this study, became mothers at a higher rate and at an earlier age than their non disabled peers. Schools need to take this information and develop powerful intervention strategies. Due to the volatile nature of this topic, we recommend individual intervention plans between school personnel, the young women, and the young women's family.

4. Not many youth from special education programs go on to college and are successful. We believe secondary schools need to reflect on their practices and try to better prepare youth for college and NOT send youth on to college who are not prepared. Similarly, colleges need to take a proactive stance in providing support for youth with disabilities in their programs. Most important, secondary programs need to develop alternative programs for the non college bound youth, those with and those without disabilities.

5. There needs to be the development of major intervention programs to address the drop out problem of youth with learning disabilities and serious behavior disorders. These programs need to implement good evaluation components that track the students beyond school and into adulthood. THERE SHOULD NOT be a study funded to determine the out of school status of drop outs--we know it is bad. Rather, funds should be used to develop and evaluate intervention programs.

Research Questions

1. Can we isolate variables that differentiate between successful and unsuccessful graduates?

Other than early parenting without a partner and a job for women, we were unable to isolate any specific variables that distinguished successful from unsuccessful graduates.

1.1 Do graduates with different disabilities experience differential post-school outcomes during the first 10 years after graduation from high school?

Graduates with learning disabilities, serious behavior disorders, sensory impairments, and physical disabilities do significantly better on post school status measures than do youth with mental retardation.

1.2 Are there any differences by gender in post-school outcomes within disability category over 10 years post high school graduation?

Women with learning disabilities do significantly less well on employment measures as compared to males with learning disabilities.

1.3 Are there differences in post-school outcomes, within disability group, and within the total group, due to socioeconomic status of the graduate's family?

We were unable to find differences based on SES status. We believe this is due to an artifact of our data collection rather than to a real no difference in outcomes based on family SES.

1.4 Is there an interaction effect of gender and SES, within disability category that is a significant predictor of post-school outcome?

We found no such interaction.

1.5 Are there differences in the life experiences of successful and unsuccessful special education graduates?

The only life difference we were able to note was the impact of early mothering on females with disabilities. Early mothering decreases the probability of being a successful adult.

2. Can patterns of successful and unsuccessful adjustment be determined?

We were unable to determine patterns of successful adjustment.

3.0 Are the post-school outcomes of the graduate's sibling different from outcomes of special education graduates?

We found no differences in the post school status between the youth with learning disabilities and their non disabled siblings. As an aside, we found no differences between the learning disabled graduates, their non disabled siblings, the non disabled graduates and their non disabled siblings on employment rates between these various groups. There were significant differences in college attendance, with the learning disabled group attending at a significantly lower rate than any other group.

4.0 Who is the most reliable informant for reporting the post-school outcomes of high school graduates?

The graduate is the most reliable informant as to their current status. Parents are reliable on general measures of employment and attending college, but not on specifics such as income level and types of benefits received.

5.0 What measures of socioeconomic status is most sensitive in predicting post-school outcomes?

We were unable to answer this question with the data we collected.

Products

There were a number of products developed by this project. Most have been referenced earlier. Some are currently under development and are not included in this report, but will be referenced here.

Brown, P. (1995). Transition services in Washington state for youth with mental retardation. Dissertation proposal, University of Washington.

Edgar, E., & Murray, C. The post-school status of high school graduates with learning disabilities a decade after graduation. Article to be submitted for publication. (Appendix 8)

Edgar, E., Murray, C., Goldstein, D. A comparison of the post-school status of youth with learning disabilities to their non disabled siblings. Manuscript in preparation.

Hadreas, C. Double jeopardy: Too early motherhood among young women with mild disabilities (A study of gender and postschool outcomes among graduates from special education). Doctoral proposal, University of Washington.

Levine, P. (1993). Gender differences in long-term postschool outcomes for youth with mild mental retardation, learning disabilities and no disabilities: Myth or reality? Doctoral dissertation, University of Washington.

Levine, P., & Edgar, E. (1994). An analysis of respondent agreement in follow-up studies of graduates of special and regular education programs. Exceptional Children, 60(4), 334-343. (Appendix 6)

Levine, P., & Edgar, E. (1995). An analysis by gender of long-term postschool outcomes of youth with and without disabilities. Exceptional Children, 61(3), 282-300. (Appendix 7)

Malmgren, K., Edgar, E., & Neel, R. S. The post-school status of youth with behavior disorders. Article to be submitted for publication. (Appendix 9)

Murray, C., Goldstein, D., & Edgar, E. A comparison of annualized earnings between youth with learning disabilities and their non disabled peers. Manuscript in preparation.

Nourse, S. W. (1995). Special education students who attend postsecondary educational programs: What programs are attended, who graduates, and does it help? Doctoral dissertation, University of Washington.

Prince, S. (1995). The first decade after graduation: Anecdotal accounts of locating and retaining a longitudinal follow-up sample. Article submitted for publication to Exceptionality. (Appendix 10)

Appendix 1

Follow-up Telephone Questionnaire

FOLLOW-UP TELEPHONE QUESTIONNAIRE
PARENT FORM: 1985 GRADUATE

________________________STUDENT ID#____________
DISTRICT/SCHOOL______________ DATE OF INTERVIEW____________
INTERVIEWER____________________ YEAR OF GRADUATION ______

Hello. This is ____________May I please speak with __________ I am calling for the_________ School District. The district is conducting a project to follow-up its graduates. We are interested in finding out how ____________has been doing since he/she graduated from school . I'd like to ask you a few questions that will help us evaluate our program and make necessary changes.
First, I need to be sure that I **am talking with the parent or guardian who is most familiar** with ___'s current life situation. Would that be you? Yes___ No___
If no: Who is the person I should speak with? Name:________________
What is his/her relationship to ___? ________________
Where does (this person) live? ____________________ Phone Number? ___________
If I am unable to reach (this person) or if he/she is not willing to be interviewed, may I recontact you? Yes__ No__

Continue with: **a) if consent form received & marked "yes";**
b) if consent form not received

a) We recently **received your consent form** to conduct this interview. It should take about 10 minutes to complete. **All** information in this interview is **completely confidential,** and you need not answer any questions you don't want to.

b) We **recently sent out letters** containing information about this project and a consent form. Even though we haven't received your consent form, we are hoping to interview as many families in the district as possible.. **All** information in this interview is **completely confidential,** and you need not answer any questions you don't want to. The interview should take about 10 minutes to complete. May I go ahead and ask you the questions?____

A. POST-SCHOOL EDUCATION:

1. Is ____________**currently** in any type of **school** or training? **Yes No**
   a. ***If Yes,* where?**__________________

1 = community college
2 = university or 4 year
3= business, vocational, or trade school
4= graduate equivalence degree (GED)
9= don't know, refused
other: __________

b. Has _____ attended any **other school or training programs since graduating** high school? **Yes No**

	School 1	School 2	School 3
c. ***If YES,*** **where?**	____________	____________	____________
did __graduate?	____________	____________	____________
If graduated, what type of degree or diploma did he/she **receive?**	____________	____________	____________

1= GED
2= diploma
3= Associates degree
4= Bachelor's degree
5= Master's degree
6= Ph.D/ Ed.D.
7= certificate
8= licence
9= Other: specify
0= don't know, refused

B. EMPLOYMENT:

2. Does __________ **currently** have a job? **Yes** **No**
(***If no, skip to #3 ; if yes,continue***)

a. What is the **current job** title or position?

____

b. How many **hours per week** does_____work?______________________
If a range is giver ask: About how many hours would it be in an average week? _________

c. How much money does ____ make per hour from his/her job? **hourly wage**? $___________
if you can't get an hourly wage ask: Can you tell me how much he/she earns per week or month then?
weekly salary? $_______ Monthly? $_________ Annual? $_________ **Tips**? $_________
If given a weekly, monthly or annual salary, ask: Is that gross pay before taxes____ or take home pay?____

d. Does _____'s employer provide **medical benefits** in connection with his job?_________
Paid Vacation? _____ Paid Sick Leave?_____ Retirement? _____

3. Does ________ **receive money** regularly from Social Security, Public Assistance, Veteran's Benefits, or some other agency or resource like that? _______ ***If YES,*** From what programs or agencies does ____ receive money? (*can be up to 3 sources*) 1-______________ 2-______________ 3-______________

1= SSI
2= Veteran's Benefits
3= Social Security-SSA
4= Public Assistance/welfare
5= Student financial aid-not a loan
6= Student loan
7= Aid to Dependant Children
8= Labor and Industry
9= Unemployment Insurance
10= Developmental Disabilities-DDD
11= Alimony or Child Support
12= Other -specify
13= unknown, refused

C. RESIDENCE:

4. Does_______ **currently live in your household?** Yes _____ No _____
a) **If yes:** We will also be contacting ____ in the near future. Does he/she have the same phone number as you? yes___ no___ If no: what is ____'s phone number? _______________ (read back to verify)
What would be a good time for us to call him/her? ___________

b) **If no: With whom does ____ currently live?** ______________________________

1= parent's home
2= other relatives
3= foster home
4= alone-in house or apt
5= with friends or roommates
6= with spouse or partner
7= dormitory/barracks
8= supervised: group home, institution, adult foster home, nursing home, ICF
9= tenant support
10= incarcerated: prison, detention home, halfway house
11= street. shelter
12= other: specify
13= unknown, refused

We are planning to interview the graduates as well as the parents, so I will need _____'s address in order to send him/her a letter, and his/her phone number so I can contact him/her.

address ______________________________________
____
____

phone number ____________________ (Read back to verify)
What would be a good time for us to call him/her? ___________

D. SOCIAL/RECREATIONAL:

5. Is _________**now** or has he/she **ever** been **married**?

1= never married	3= previously married
2= now married	4= don't know, refused

6. Does____have any **children**? Yes___No___ ***if yes, ask:*** **how many?** __________
If no mark a "0"

7. How **satisfied** are you with ______'s **overall life situation** *(employment, school, residence, social life)* **now?**

1= Very Satisfied	**3= Not Very Satisfied**
2= Somewhat Satisfied	**4= Not at all Satisfied**

9= don't know, refused

E. PARENT/ FAMILY DEMOGRAPHICS:

Skip this section if you are speaking to a person in a group home or other institutional setting.

The last few questions pertain to **you and your family**. I am going to ask you some questions regarding your **current situation**, and some that refer to **1985** when ____ graduated.

Was ______ living with you in 1985 when he/she graduated? _____.

9. a. How many **people are living in your household today including yourself**? *(currently)*__________
b. Is this the **same number** of people who were **living in your household in 1985** when _____graduated?
Yes___No___ ***(If no),* how many were living with you then?** _____

10. a. How many **years of school** have **you** completed? ______________
(12 being high school grad; 13 being 1 year college etc...01=GED)
b. Did any of your **schooling occur in the past 5 years?** **Yes**____**No**_____
***(if yes)* How many years of education had you completed in 1985, at the time of ____'s graduation?** ___

11. a. Are **you currently employed?** **Yes**___ **No**___
b. Were you **employed in 1985** when ____ graduated from school? **Yes**___ **No**___

12. a. What would you say has been your **main occupation** for the last 5 years?
____
b. What would you say was your **main occupation** during ___'s high school years?
____

13. Do you have a wife/husband or partner with whom you are living now? **Yes___ No____**
(if yes, ask the following for the spouse or partner; If no, skip to #17)

14. How many **years of school** has he/she completed? ______________
(12 being high school grad; 13 being 1 year college etc...)

15. Is he/she **employed? Yes____ No_____**

16. What would you say has been his/her **main occupation** for the last 5 years?
____

17 I'm going to read some income ranges; Please stop me when I get to the one that you would say **includes your total household income before taxes** last year?

a) less than $8,500
b) $ 8,500 to $10,500
c) $10,500 to $13,000
d) $13,000 to $15,000
e) $15,000 to $17,000
f) $17,000 to $20,000
g) $20,000 to $25,000
h) $25,000 to $30,000
i) $30,000 or more

18. a. Was your **current partner living with you in 1985** when ___ graduated? **Yes_____No_____**
(if yes, continue b & c, then skip to #20; if no skip to #19)

b. Was he/she **employed** then? **Yes_____ No_____**
c. What would you say was his/her **main occupation** while ___ was **in high school?**
____

19. a. Did you have a **partner with whom you were living in 1985** when ____ graduated? **Yes____No____**
(if yes, continue; if no, skip to #20)

b. Was he/she **employed** then? **Yes____ No_____**
c. What would you say was his/her **main occupation** while ___ was **in high school?**
____

20 We're almost done. I'm going to read off the income ranges I read before; As well as you can remember, would you please stop me when I get to the one that you would say **included your total household income before taxes** in 1985?

a) less than $8,500
b) $ 8,500 to $10,500
c) $10,500 to $13,000
d) $13,000 to $15,000
e) $15,000 to $17,000
f) $17,000 to $20,000
g) $20,000 to $25,000
h) $25,000 to $30,000
i) $30,000 or more

Thank-you very much. I appreciate the time and information you shared with me during this interview. We will be contacting you again next year to update some of this information. May I verify that we have your correct mailing address now? The address we have...(read the address from contact sheet. Write new address in if respondent indicates that a change or correction is needed. May I repeat that back to make sure that I got it correctly?) (verify)

Thank-you. Just in case you do move or change your phone during the next year, would you give me the name and phone number of someone who will always know how to get in touch with you? (Ask respondent for spelling of contact person's name, if needed, and repeat phone number back to verify it.)

Thanks again for your time. I look forward to talking with you again next year.

FOLLOW-UP TELEPHONE QUESTIONNAIRE
PARENT FORM: 1985 GRADUATE - YEAR 5

________________________STUDENT ID#__________________
DISTRICT/SCHOOL____________________DATE OF INTERVIEW___________
INTERVIEWER________________________YEAR OF GRADUATION _________

Hello. I'd like to speak with ________. My name is _________. I am calling for the _____School District. We spoke with you last year around this time. We are now in the last year of our five-year quality of life study of the 1985 graduates. I'd like to ask you how_______ is doing using the same series of questions as last year. All information is strictly confidential. This will only take 2 or 3 minutes. Okay? (If yes, initial ____and proceed. If no, find out when to call back.)

A. POST-SCHOOL EDUCATION (DO NOT INCLUDE "ON-THE-JOB TRAINING" OR SHELTERED WORKSHOP IN THIS SECTION--THEY ARE PAID EMPLOYMENT)

1. Is ______________**currently** in any type of **school** or training?_______

a. ***If Yes,* where?**_________

0=social skills
1=community college
2=university or 4 year
3=business/vocational/trade school
4=grad equiv (GED)
5=job skills(for persons with handicaps,e.g.DDD prog)
7=Job Corps
8=other______
9=dont know/refused

Same program as last year?______

Finished previous school program?___
If yes, what degree/diploma__________

b. **Has ____completed any school program since last interview?** **Yes____No____**

	School 1	School 2
c. ***If YES*, where?**	______________	______________
What degree	______________	______________

or diploma did he/she receive?

1 = GED
2 = diploma
3 = Associates degree
4 = Bachelor's degree
5 = Master's degree
6 = Ph.D./Ed.D./MD
7 = certificate
8 = license
9 = Other: specify _______
0 = don't know/refused

B. EMPLOYMENT:

2. Does __________**currently work for pay** at a job or in his/her own business?
(If no, or DK, skip to #3 ; if yes,continue)

a. **Is he/she self-employed or does he/she work for someone else as an employee?**
Self employed Employed DK No
If self-employed: What kind of business (work) does _________have (do)?______
Does _______run the business alone or does he/she have partners or employees?
Alone Employees Partners DK
If employed: What kind of work does ________ do? ____________________
What kind of company/business does he/she work for? _________________

b. How many **hours per week** does_____work?__________

c. How much **money** does ____ make **per hour** from his/her job? **Hourly wage**? $_______
If you can't get an hourly wage ask: Can you tell me how much he/she earns:
Weekly $________ Monthly? $_________ Annually? $________ **Tips?** _____
If a weekly, monthly or annual salary, ask: Is that gross pay before taxes___or take home pay?___

d. **Is ____covered by medical insurance?_____If no, does___receive medical coupons?**
If yes, Is it related to **his/her job?**___________**If yes:**
Does _____**'s employer** pay the **medical premium** in connection with the job?_________
If not related to job, who pays: **Self**_____ **Parents/Guardians**_____ **Public**_____
Paid Vacation? _____ **Paid Sick Leave?**_____ **Retirement?** _____
(Now go to Question 4 after benefits questions have been completed)

3. **If not currently employed, is____covered by any kind of medical insurance including medical coupons?________**

If Yes, by whom:
Self_____ Parents/Guardians_____ Public_____

4. Does_________**receive money** regularly from Social Security, Public Assistance, Veteran's Benefits, or some other agency or resource like that? ________***If YES,*** From what programs or agencies does ____ receive money? (*can be up to 3 sources)* 1-_______________ 2-_______________ 3-_______________

1=SSI
2=Veteran's Benefits
3=Social Security-SSA
4=Public Assistance/welfare
5=Scholarships-**not a loan**
6=Student loan
7=Aid to Dependant Children
8=Labor and Industry
9=Unemployment Insurance
10=Developmental Disabilities
11=Alimony or Child Support
12=Military Reserves,GI Bill
13=Div Voc Rehab (DVR)
17=Other:_______________
18=unknown/refused

C. RESIDENCE:

5. Does________**currently live in your household?** Yes ____ No _____

a) **If yes and it is a parent, go to #6**
(If yes, but not a parent, code as appropriate:__________________)

b) **If no: Where does ____ currently live?**_____________________
(Please note: If no, but does live with other parent, code "1")

1=parent's home
2=other relatives/ host family
3=foster home
4=in house or apt
7=dormitory/barracks
8=supervised: group home, institution,adult foster home, nursing home, ICF
9=tenant support
10=incarcerated: prison, detention home, halfway house
11=street shelter
12=employer-provided: eg ship
13=traveling
18=other:_________
19=unknown/refused

D.SOCIAL/RECREATIONAL:

6. Is __________**now** or has he/she **ever** been **married**?

1= never married
2= now married
3= previously married
4= don't know, refused

a. **If now married, is he/she living with spouse:** yes ____ no____
(If no, go to #7; if yes, continue):

b. Does **he/she currently work for pay** at a job or in his/her own business?
(If no, or DK, skip to #7 ; if yes,continue)
Is he /she self employed or does he/she work for someone else as an employee?
Self-employed Employed DK No
If self-employed: What kind of business (work) does _______have(do)?__________________
Does she/he run the business alone or does he/she have partners or employees?
Alone Employees Partners DK
If employed: What kind of work does ______do?________________________________
What kind of company/business does he/she work for? ____________________________

c. **How many years of school has he/she completed?**_________

7. Does____have any **children**? Yes___No___ ***if yes, ask:*** how many? ____***If no mark a*** "0"
If yes, ask: How many children live with her/him? __________

8. How **satisfied** are you with ______'s **current overall life situation?** *employment, school, residence, social life*

1= Very Satisfied **3= Not Very Satisfied**

2= Somewhat Satisfied **4= Not at all Satisfied**

9= don't know, refused

Thank you very much. We appreciate the time and information you have shared with us over the past 5 years of this study. We hope the information will assist educators in planning future programs in the high schools that will benefit all students. Bye, now, and thanks again.

Remarks:

Appendix 2

Year 5 Summaries
1985 Cohort

March, 1995
Univ. of Wa.
Decade Project

FAMILY INFORMANT INFORMATION

TOTAL 1985 GRADUATES - YEAR 5
10 YEARS AFTER GRADUATION

	Orthopedic Impaired	Health Impaired	Mild MR	Moderate MR	Severe MR	Multi HC	Hearing Impaired	Visual Impaired	Behavior Disordered	Learning Disabled	Total Disabled	Total NonHC
POSSIBLE CONTACT:	2	4	18	15	7	10	5	1	7	84	153	158
TOTAL CONTACT:	2=100%	4=100%	17=94%	15=100%	7=100%	10=100%	5=100%	1=100%	7=100%	84=100%	152=99%	154=97%
CURRENTLY IN SCHOOL:	0	0	0	2=13%	0	0	1=20%	0	1=14%	5=6%	9=6%	22=14%
EVER GRADUATE POST HIGH SCH:.	0	2=50%	3=18%	0	1=14%	1=10%	3=60%	1=100%	2=29%	37=44%	50=33%	105=68%
CURRENTLY EMPLOYED:	1=50%	3=75%	8=47%	10=67%	4=57%	3=30%	4=80%	0	3=43%	62=74%	98=64%	135=88%
SALARY* $180+/WEEK:	0	2=67%	4=50%	4=40%	0	0	2=50%	0	2=67%	44=71%	58=59%	75=56%
SALARY** $180+/WEEK:	0	2=50%	4=23%	4=27%	0	0	2=40%	0	2=29%	44=52%	58=38%	75=49%
CURRENTLY UNENGAGED:	1=50%	1=25%	9=53%	4=27%	3=43%	7=70%	0	1=100%	3=43%	17=20%	46=30%	14=9%
RESIDENCE												
FAMILY	1=50%	3=75%	6=35%	6=40%	4=57%	2=20%	1=20%			20=24%	43=28%	27=17%
SUPERVISED			2=12%	8=53%	3=43%	8=80%			1=14%	1=1%	23=15%	1=1%
INDEPENDENT	1=50%	1=25%	9=53%	1=7%			4=80%	1=100%	6=86%	63=75%	86=57%	126=82%

* Salary percentages based on those graduates who are currently employed.
** Salary percentages based on entire graduate populations.
34% of the total respondents did not answer salary question for those employed: 39% of the NonHC, 29% of the LD.

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FAMILY INFORMANT INFORMATION
TOTAL 1985 GRADUATES - YEAR 5

10 YEARS AFTER GRADUATION

Gender

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEARING IMPAIRED n=5	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=154
Male:		2=50%	10=59%	7=47%	2=29%	5=50%	3=60%	1=100%	6=86%	58=69%	94=62%	95=62%
Female:	2=100%	2-=50%	7=41%	8=53%	5=71%	5=50%	2=40%		1=14%	26=31%	58=38%	59=38%

Currently in Post High School Education

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEARING IMPAIRED n=5	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=154
YES:				2=13%			1=20%		1=14%	5=6%	9=6%	22=14%
NO:	2=100%	4=100%	17=100%	13=87%	7=100%	10=100%	4=80%	1=100%	6=86%	79=94%	143=94%	132=86%

Type of Post High School Program Currently Attended

	MODERATE MR n=2	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=5	TOTAL DISABLED n=9	TOTAL NONHC n=22
SOCIAL SKILLS PROGRAM:	1=50%				1=11%	
JOB SKILLS PROGRAM:				1=20%	1=11%	
COMMUNITY COLLEGE:			1=100%	3=60%	4=44%	4=18%
UNIVERSITY / 4 YR. SCHOOL:		1=100%			1=11%	14=64%
BUSINESS, VOC, TRADE SCHOOL:	1=50%			1=20%	2=22%	3=14%
MISSING:						1=4%

Ever Completed Post High School Program

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEARING IMPAIRED n=5	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=154
YES:		2=50%	3=18%		1=14%	1=10%	3=60%	1=100%	2=29%	37=44%	50=33%	105=68%
NO:	2=100%	2=50%	14=82%	15=100%	6=86%	9=90%	2=40%		5=71%	47=56%	102=67%	49=32%

Degrees Received from Post High School Completion*

	HEALTH IMPAIRED n=2	MILD MR n=3	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=3	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=37	TOTAL DISABLED n=50	TOTAL NONHC n=105
Associate's Degree:	1							9	10	20
Bachelor's Degree:	1						1	2	4	71
Master' Degree:										10
Ph.D./Ed.D./MD:										3
Diploma:		1		1	1			6	9	2
Certificate:	1	1	1		2	1	1	23	30	20
License:		1					1	3	5	6
Unknown/Refused:								1	1	2

* A graduate may have received more than one type of degree.

Currently Employed

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEARING IMPAIRED n=5	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=154
YES:	1=50%	3=75%	8=47%	10=67%	4=57%	3=30%	4=80%		3=43%	62=74%	98=64%	135=88%
NO:	1=50%	1=25%	9=53%	5=33%	3=43%	7=70%	1=20%	1=100%	4=57%	22=26%	54=37%	19=12%

Hours per Week for Current Employment

	ORTHOPEDIC IMPAIRED n=1	HEALTH IMPAIRED n=3	MILD MR n=8	MODERATE MR n=10	SEVERE MR n=4	MULTI HC n=3	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=62	TOTAL DISABLED n=98	TOTAL NONHC n=135
PART TIME/ LT 40 HRS.:	1=100%	2=67%	2=25%	6=60%	3=75%	3=100%	3=75%		7=11%	27=28%	19=14%
FULL TIME/ 40 HRS.+:		1=33%	4=50%	4=40%	1=25%		1=25%	2=67%	52=84%	65=66%	114=84%
MISSING:			2=25%					1=33%	3=5%	6=6%	2=2%

Salary per Week for Current Employment

	ORTHOPEDIC IMPAIRED n=1	HEALTH IMPAIRED n=3	MILD MR n=8	MODERATE MR n=10	SEVERE MR n=4	MULTI HC n=3	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=62	TOTAL DISABLED n=98	TOTAL NONHC n=135
LT $180.00 PER WEEK:	1=100%	1=33%	1=12%	5=50%	3=75%	3=100%	1=25%			15=15%	7=5%
$180+ PER WEEK:		2=67%	4=50%	4=40%			2=50%	2=67%	44=71%	58=59%	75=56%
UNKNOWN:			3=38%	1=10%	1=25%		1=25%	1=33%	18=29%	25=26%	53=39%

Medical Benefits

	ORTH IMPAIR	HEALTH IMPAIRED	MILD MR	MODERATE MR	SEVERE MR	MULTI HC	HEAR IMPAIR	VISUAL IMPAIR	BEHAVIOR DISORDER	LEARNING DISABLED	TOTAL DISABLED	TOTAL NONHC
EMPLOYED	n=1	n=3	n=8	n=10	n=4	n=3	n=4	n=0	n=3	n=62	n=98	n=135
Employer Paid:		2=67%	2=25%	4=40%			1=25%		3=100%	36=58%	48=	79=58%
Parent's Coverage:		1=33%	3=38%								4=	1=1%
Self Covered:					1=25%					5=8%	6=	15=11%
Spouse's Coverage:										4=6%	4=	16=12%
Coupons/Govt. Agency:	1=100%			5=50%	3=75%	3=100%	1=25%				13=	3=2%
No Coverage:			2=25%				1=25%			11=18%	14=	6=4%
Missing:			1=12%	1=10%			1=25%			6=10%	9=	18=13%
UNEMPLOYED	n=1	n=1	n=9	n=5	n=3	n=7	n=1	n=1	n=4	n=22	n=54	n=19
Parent's Coverage:		1=100%							1=25%		2=4%	1=5%
Self Coverage:												3=16%
Spouse's Coverage:									1=25%	3=14%	4=7%	5=26%
Coupons/Govt. Agency:	1=100%		6=33%	3=60%	3=100%	7=100%	1=100%	1=100%	1=25%	9=41%	32=59%	2=11%
Previous Employer:										1=4%	1=2%	
No Coverage:			1=11%	2=40%					1=25%	7=32%	11=20%	6=31%
Missing:			2=22%							2=9%	4=7%	2=11%

Other Benefits Received with Current Employment

	ORTHOPEDIC IMPAIRED n=1	HEALTH IMPAIRED n=3	MILD MR n=8	MODERATE MR n=10	SEVERE MR n=4	MULTI HC n=3	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=62	TOTAL DISABLED n=98	TOTAL NONHC n=135
VACATION											
YES:		2=67%	5=63%	7=70%	2=50%	3=100%	1=25%	3=100%	41=66%	64=65%	93=69%
NO:		1=33%	2=25%	3=30%	2=50%		3=75%		9=15%	20=21%	19=14%
UNKNOWN:	1=100%		1=12%						12=19%	14=14%	23=17%
SICK LEAVE											
YES:		2=67%	4=50%	5=50%	2=50%	1=33%	1=25%	3=100%	35=57%	53=54%	87=64%
NO:		1=33%	3=38%	5=50%	2=50%	2=67%	3=75%		13=21%	29=30%	23=17%
UNKNOWN:	1=100%		1=12%						14=22%	16=16%	25=19%
RETIRMENT											
YES:		2=67%	1=12%	5=50%	1=25%		1=25%	3=100%	26=42%	39=40%	66=49%
NO:	1=100%	1=33%	3=38%	5=50%	3=75%	3=100%	3=75%		23=37%	42=43%	46=34%
UNKNOWN:			4=50%						13=21%	17=17%	23=17%

Currently Unengaged

(Not in School and Not Working)

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEARING IMPAIRED n=5	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=154
YES:	1=50%	1=25%	9=53%	4=27%	3=43%	7=70%		1=100%	3=43%	17=20%	46=30%	14=9%
NO:	1=50%	3=75%	8=47%	11=73%	4=57%	3=30%	5=100%		4=57%	67=80%	106=70%	140=91%

Other Income Received*

	ORTH IMPAIR n=2	HEALTH IMPAIR n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEAR IMPAIR n=5	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=154
SSI:	2		5	9	6	7	2		1	2	34	1
SSA:			1	4	1	3	1	1		1	12	
DVR:							1				1	
Welfare/ Public Assistance:										2	2	
Student aid or Scholarship:			1						1		2	2
Student Loan:							1				1	5
Aid to Dependent Children:										4	4	2
Labor & Industry:												1
Unemployment Insurance:									1	1	2	4
Military Reserves:												1
Veteran's Benefits:												1
Other:												2

* Results are not exclusive; a graduate may receive more than one other outside income.

Graduate's Marital Status

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEARING IMPAIRED n=5	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=158
Never Married	1=50%	3=75%	12=71%	13=87%	6=86%	10=100%	5=100%	1=100%	5=71%	53=63%	109=72%	96=62%
Currently Married*	1=50%	1=25%	4=23%	1=7%					2=29%	25=30%	34=22%	56=36%
Was Married				1=7%	1=14%					6=7%	8=5%	2=1%
Missing			1=6%								1=1%	

* 3 Nondisabled graduates and 2 Learning Disabled graduates do not currently live with their spouses.

Does Graduate Have Children

Children	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEARING IMPAIRED n=5	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=154
0:	1=50%	3=75%	14=82%	15=100%	6=86%	10=100%	3=60%	1=100%	5=71%	55=65%	113=75%	125=81%
1:	1=50%	1=25%	2=12%*				2=40%			16=19%*	22=14%	21=14%*
2:			1=6%		1=14%					10=12%	12=8%	5=3%
3:									2=29%	3=4%	5=3%	3=2%

* 1 Mild MR graduate, 1 Learning Disabled graduate and 4 Nondisabled graduates do not currently live with their children.

Graduate's Current Residence

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEARING IMPAIRED n=5	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=154
Parent's Home:	1=50%	3=75%	5=29%	5=33%	4=57%	2=20%				20=24%	40=26%	25=16%
Other Relatives:			1=6%	1=7%			1=20%				3=2%	2=1%
On own in House,Apt:	1=50%	1=25%	9=53%	1=7%			4=80%	1=100%	6=86%	61=73%	84=55%	126=82%
Incarcerated:										1=1%	1=1%	1=1%
Supervised Setting:			1=6%	7=47%	2=29%	7=70%					17=11%	
Tenant Support:			1=6%	1=7%	1=14%	1=10%			1=14%		5=3%	
On the Street										1=1%	1=1%	
Traveling:										1=1%	1=1%	

Satisfaction with Overall Life Situation

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=4	MILD MR n=17	MODERATE MR n=15	SEVERE MR n=7	MULTI HC n=10	HEARING IMPAIRED n=5	VISUAL IMPAIRED n=1	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=84	TOTAL DISABLED n=152	TOTAL NONHC n=154
Very Satisfied:	1=50%	2=50%	4=23%	7=47%	1=14%	4=40%	1=20%		4=57%	42=50%	66=43%	102=66%
Somewhat Satisfied:	1=50%		7=41%	8=53%	4=57%	4=40%	4=80%		3=43%	35=42%	66=43%	42=27%
Not Very Satisfied:		2=50%	1=6%		2=29%	1=10%		1=100%		3=3%	10=7%	6=4%
Not at All Satisfied:			4=23%			1=10%				4=5%	9=6%	3=2%
Missing:			1=6%								1=1%	1=1%

March, 1995
Univ. of Wa.
Decade Project

FAMILY INFORMANT INFORMATION
SEATTLE SCHOOL DISTRICT
1985 GRADUATES - YEAR 5
10 YEARS AFTER GRADUATION

	Orthopedic Impaired	Mild MR	Moderate MR	Severe MR	Multi HC	Hearing Impaired	Behavior Disordered	Learning Disabled	Total HC	Total NonHC
POSSIBLE CONTACT:	2	7	7	3	4	3	3	46	75	77
TOTAL CONTACT:	2=100%	7=100%	7=100%	3=100%	4=100%	3=100%	3=100%	46=100%	75=100%	73=95%
CURRENTLY IN SCHOOL:	0	0	0	0	0	0	0	4=9%	4=5%	10=14%
EVER GRADUATE POST HIGH SCH.:	0	2=29%	0	0	0	2=67%	1=33%	16=35%	21=28%	50=68%
CURRENTLY EMPLOYED:	1=50%	3=43%	3=43%	1=33%	0	3=100%	0	30=65%	41=55%	64=88%
SALARY* $180+/WEEK:	0	1=33%	0	0	0	2=67%	0	18=60%	21=51%	37=58%
SALARY** $180+/WEEK:	0	1=14%	0	0	0	2=67%	0	18=39%	21=28%	37=50%
CURRENTLY UNENGAGED:	1=50%	4=57%	4=57%	2=67%	4=100%	0	3=100%	13=28%	31=41%	7=10%
RESIDENCE										
FAMILY	1=50%	3=43%	3=43%	2=67%	1=25%	1=25%		13=28%	24=32%	19=26%
SUPERVISED		1=14%	4=57%	1=33%	3=75%		1=33%	1=2%	11=15%	1=1%
INDEPENDENT	1=50%	3=43%				2=75%	2=67%	32=70%	40=53%	53=73%

* Salary percentages based on those graduates who are currently employed.
** Salary percentages based on entire graduate populations.
32% of all respondents did not answer salary question for those employed: 31% of the NonHC, 40% of the LD.

FAMILY INFORMANT INFORMATION
SEATTLE SCHOOL DISTRICT
1985 GRADUATES - YEAR 5

10 YEARS AFTER GRADUATION

Gender

	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=73
Male:		5=71%	3=43%		2=50%	3=100%	3=100%	28=61%	44=59%	45=62%
Female:	2=100%	2=29%	4=57%	3=100%	2=50%			18=39%	31=41%	28=38%

Currently in Post High School Education

	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=73
YES:								4=9%	4=5%	10=14%
NO:	2=100%	7=100%	7=100%	3=100%	4=100%	3=100%	3=100%	42=91%	71=95%	63=86%

Type of Post High School Program Currently Attended

	LEARNING DISABLED n=4	TOTAL DISABLED n=4	TOTAL NONHC n=10
COMMUNITY COLLEGE:	2=50%	2=50%	1=10%
UNIVERSITY / 4 YR. SCHOOL:			7=70%
BUSINESS, VOC, TRADE SCHOOL:	1=25%	1=25%	2=20%
JOB SKILLS PROGRAM:	1=25%	1=25%	

Ever Completed Post High School Program

	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=73
YES:		2=29%				2=67%	1=33%	16=35%	21=28%	50=68%
NO:	2=100%	5=71%	7=100%	3=100%	4=100%	1=33%	2=67%	30=65%	54=72%	23=32%

Degrees Received from Post High School Completion*

	MILD MR n=2	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=16	TOTAL DISABLED n=21	TOTAL NONHC n=50
ASSOCIATE'S DEGREE:				3	3	11
BACHELOR'S DEGREE:				1	1	31
MASTER'S DEGREE:						3
PH.d/ED.d/MD.:						1
DIPLOMA:				3	3	2
CERTIFICATE:	1	2	1	10	14	9
LICENSE:	1				1	4
UNKNOWN / REFUSED:				1	1	1

* A graduate may have received more than one type of degree.

Currently Employed

	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=77
YES:	1=50%	3=43%	3=43%	1=33%		3=100%		30=65%	41=55%	64=88%
NO:	1=50%	4=57%	4=57%	2=67%	4=100%		3=100%	16=35%	34=45%	9=12%

Hours per Week for Current Employment

	ORTHOPEDIC IMPAIR n=1	MILD MR n=3	MODERATE MR n=3	SEVERE MR n=1	HEARING IMPAIRED n=3	LEARNING DISABLED n=30	TOTAL DISABLED n=41	TOTAL NONHC n=64
PART TIME/ LT 40 HRS.:	1=100%	1=33%	3=100%	1=100%	2=67%	5=17%	13=32%	13=20%
FULL TIME/ 40 HRS.+:		2=67%			1=33%	23=77%	26=63%	51=80%
MISSING:						2=6%	2=5%	

Salary per Week for Current Employment

	ORTHOPEDIC IMPAIR n=1	MILD MR n=3	MODERATE MR n=3	SEVERE MR n=1	HEARING IMPAIRED n=3	LEARNING DISABLED n=30	TOTAL DISABLED n=41	TOTAL NONHC n=64
LT $180.00 PER WEEK:	1=100%	1=33%	3=100%	1=100%			6=15%	7=11%
$180+ PER WEEK:		1=33%			2=67%	18=60%	21=51%	37=58%
MISSING:		1=33%			1=33%	12=40%	14=34%	20=31%

Medical Benefits

	ORTH IMP	MILD MR	MOD MR	SEV MR	MULTI HC	HEAR IMP	BD	LD	TOTAL DISABLE	TOTAL NONHC
EMPLOYED	n=1	n=3	n=3	n=1	n=0	n=3	n=0	n=30	n=41	n=64
Employer Paid:		1=33%				1=33%		16=53%	18=44%	35=55%
Parent's Coverage:		1=33%							1=2%	
Self Covered:								2=7%	2=5%	10=16%
Spouse's Coverage:								3=10%	3=7%	8=12%
Coupons/Govt. Agency:	1=100%		3=100%	1=100%		1=33%			6=15%	
No Coverage:		1=33%				1=33%		6=20%	8=20%	3=5%
Unknown:								3=10%	3=7%	8=12%
UNEMPLOYED	n=1	n=4	n=4	n=2	n=4	n=0	n=3	n=16	n=34	n=9
Previous Employer:								1=7%	1=3%	
Self Coverage:										2=22%
Spouse's Coverage:							1=33%	1=7%	2=6%	2=22%
Coupons/Govt. Agency:	1=100%	3=75%	3=75%	2=100%	4=100%		1=33%	8=50%	22=64%	2=22%
No Coverage:			1=25%				1=33%	4=25%	6=18%	2=22%
Unknown:		1=25%						2=12%	3=9%	1=11%

Other Benefits Received with Current Employment

	ORTHOPEDIC IMP n=1	MILD MR n=3	MODERATE MR n=3	SEVERE MR n=1	HEARING IMPAIRED n=3	LEARNING DISABLED n=30	TOTAL DISABLED n=41	TOTAL NONHC n=64
VACATION								
YES:		2=67%	1=33%		1=33%	19=63%	23=56%	45=70%
NO:		1=33%	2=67%	1=100%	2=67%	6=20%	12=29%	9=14%
UNKNOWN:	1=100%					5=17%	6=15%	10=16%
SICK LEAVE								
YES:		1=33%			1=33%	16=53%	18=44%	39=61%
NO:		1=33%	3=100%	1=100%	2=67%	8=27%	15=37%	15=23%
UNKNOWN:	1=100%	1=33%				6=20%	8=19%	10=16%
RETIRMENT								
YES:		1=33%		1=100%	1=33%	11=37%	14=34%	31=48%
NO:	1=100%	1=33%	3=100%		2=67%	12=40%	19=46%	24=38%
UNKNOWN:		1=33%				7=23%	8=19%	9=14%

Currently Unengaged
(Not in School and Not Working)

	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=73
YES:	1=50%	4=57%	4=57%	2=67%	4=100%		3=100%	13=28%	31=41%	7=10%
NO:	1=50%	3=43%	3=43%	1=33%		3=100%		33=72%	44=59%	66=90%

Other Income Received*

	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=73
SSI:	2	3	5	3	3	1	1	2	20	1
SSA:			3	1	1	1		1	7	
Welfare:								2	2	
Student Scholarship:										1
Student Loan:										3
Aid to Dependent Children:								3	3	2
Unemploy Insurance:							1		1	1
Military Reserves:										1
Veteran's Benefits:										1

* Results are not exclusive; a graduate may receive more than one other outside income.

Graduate's Marital Status

	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=73
Never Married	1=50%	6=86%	6=86%	3=100%	4=100%	3=100%	2=67%	28=61%	53=71%	49=67%
Current Married	1=50%	1=14%	1=14%				1=33%	14=30%	18=24%	22=30%
Yes Live w/Spouse	1=100%	1=100%	1=100%				1=100%	12=86%	16=89%	20=91%
Was Married								4=9%	4=5%	2=3%

Does Graduate Have Children

Children	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=73
0:	1=50%	6=86%	7=100%	3=100%	4=100%	1=33%	2=67%	26=57%	50=67%	59=81%
1:	1=50%	1=14%				2=67%		11=24%*	15=20%	9=12%*
2:								7=15%	7=9%	3=4%
3:							1=33%	2=4%	3=4%	2=3%

* 1 Nonhandicapped graduate and 1 Learning Disabled graduate are not living with their children.

Graduate's Current Residence

	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=73
Parent's Home:	1=50%	2=29%	2=29%	2=67%	1=25%			13=28%	21=28%	17=23%
Other Relatives:		1=14%	1=14%			1=33%			3=4%	2=3%
On own in House,Apt:	1=50%	3=43%				2=67%	2=67%	31=67%	39=52%	53=73%
Incarcerated:								1=2%	1=1%	1=1%
Supervised Setting:		1=14%	3=43%		3=75%				7=10%	
Tenant Support:			1=14%	1=33%			1=33%		3=4%	
On the Street:								1=2%	1=1%	

Satisfaction with Overall Life Situation

	ORTH IMPAIR n=2	MILD MR n=7	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=46	TOTAL DISABLED n=75	TOTAL NONHC n=73
Very Satisfied:	1=50%	1=14%	3=43%		1=25%		1=33%	22=48%	29=39%	46=63%
Somewhat Satisfied:	1=50%	4=579%	4=57%	3=100%	2=50%	3=100%	2=67%	18=39%	37=49%	23=32%
Not Very Satisfied:					1=25%			3=6%	4=5%	4=5%
Not at All Satisfied:		2=29%						3=6%	5=7%	

March, 1995
Univ. of Wa.
Decade Project

FAMILY INFORMANT INFORMATION
HIGHLINE SCHOOL DISTRICT
1985 GRADUATES - YEAR 5
10 YEARS AFTER GRADUATION

	Mild MR	Moderate MR	Severe MR	Multi HC	Hearing Impaired	Visually Impaired	Behavior Disordered	Learning Disabled	Total HC	Total NonHC
POSSIBLE CONTACT:	7	3	2	2	2	1	2	19	38	34
TOTAL CONTACT:	7=100%	3=100%	2=100%	2=100%	2=100%	1=100%	2=100%	19=100%	38=100%	34=100%
CURRENTLY IN SCHOOL:	0	2=67%	0	0	1=50%	0	0	0	3=8%	7=21%
EVER GRADUATE POST HIGH SCH.:	1=14%	0	1=50%	1=50%	1=50%	1=100%	1=50%	8=42%	14=37%	22=65%
CURRENTLY EMPLOYED:	4=57%	2=67%	2=100%	1=50%	1=50%	0	2=100%	15=79%	27=71%	30=88%
SALARY* $180+/WEEK:	2=50%	0	0	0	0	0	1=50%	13=87%	16=59%	9=30%
SALARY** $180+/WEEK:	2=29%	0	0	0	0	0	1=50%	13=68%	16=42%	9=26%
CURRENTLY UNENGAGED:	3=43%	0	0	0	0	1=100%	0	3=16%	7=18%	3=9%
RESIDENCE										
FAMILY	2=29%	1=33%	1=50%					2=10%	6=16%	4=12%
SUPERVISED		1=33%	1=50%	2=100%					4=10%	
INDEPENDENT	5=71%	1=33%			2=100%	1=100%	2=100%	17=90%	28=74%	30=88%

* Salary percentages based on those graduates who are currently employed.
** Salary percentages based on entire graduate populations.
47% of all respondents did not answer salary question for those employed: 70% of the NonHC, 13% of the LD.

FAMILY INFORMANT INFORMATION
HIGHLINE SCHOOL DISTRICT
1985 GRADUATES - YEAR 5

10 YEARS AFTER GRADUATION

Gender

	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEARING IMPAIR n=2	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=34
Male:	3=43%	1=33%	1=50%			1=100%	2=100%	15=79%	23=61%	21=62%
Female:	4=57%	2=67%	1=50%	2=100%	2=100%			4=21%	15=39%	13=38%

Currently in Post High School Education

	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEARING IMPAIR n=2	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=34
YES:		2=67%			1=50%				3=8%	7=20%
NO:	7=100%	1=33%	2=100%	2=100%	1=50%	1=100%	2=100%	19=100%	35=92%	27=80%

Type of Post High School Program Currently Attended

	MODERATE MR n=2	HEARING IMPAIR n=1	TOTAL DISABLED n=3	TOTAL NONHC n=7
SOCIAL SKILLS PROGRAM:	1=50%		1=33%	
COMMUNITY COLLEGE:				3=43%
UNIVERSITY / 4 YR. SCHOOL:		1=100%	1=33%	3=43%
BUSINESS, VOC, TRADE SCHOOL:	1=50%		1=33%	
MISSING:				1=14%

Ever Completed Post High School Program

	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEARING IMPAIR n=2	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=34
YES:	1=14%		1=50%	1=50%	1=50%	1=100%	1=50%	8=42%	14=41%	22=65%
NO:	6=86%	3=100%	1=50%	1=50%	1=50%		1=50%	11=58%	24=59%	12=35%

Degrees Received from Post High School Completion*

	MILD MR n=1	SEV MR n=1	MULTI HC n=1	HEAR IMPAIR n=1	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=8	TOTAL DISABLED n=14	TOTAL NONHC n=22
ASSOCIATE'S DEGREE:							1	1	4
BACHELOR'S DEGREE:						1		1	14
MASTER'S DEGREE:									2
DIPLOMA:	1		1	1			3	6	
CERTIFICATE:		1			1		5	7	6
LICENSE:						1	2	3	1
UNKNOWN / REFUSED:									1

* A graduate may have received more than one type of degree.

Currently Employed

	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEARING IMPAIR n=2	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=34
YES:	4=57%	2=67%	2=100%	1=50%	1=50%		2=100%	15=79%	27=71%	30=88%
NO:	3=43%	1=33%		1=50%	1=50%	1=100%		4=21%	11=29%	4=12%

Hours per Week for Current Employment

	MILD MR n=4	MODERATE MR n=2	SEVERE MR n=2	MULTI HC n=1	HEARING IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=15	TOTAL DISABLED n=27	TOTAL NONHC n=30
PART TIME/ LT 40 HRS.:		2=100%	1=50%	1=100%	1=100%		1=7%	6=22%	3=10%
FULL TIME/ 40 HRS.+:	2=50%		1=50%			1=50%	14=93%	18=67%	26=87%
MISSING:	2=50%					1=50%		3=11%	1=3%

Salary per Week for Current Employment

	MILD MR n=4	MODERATE MR n=2	SEVERE MR n=2	MULTI HC n=1	HEARING IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=15	TOTAL DISABLED n=27	TOTAL NONHC n=30
LT $180.00 PER WEEK:		2=100%		1=100%	1=100%			4=15%	
$180+ PER WEEK:	2=50%		1=50%			1=50%	13=87%	17=63%	9=30%
MISSING:	2=50%		1=50%			1=50%	2=13%	6=22%	21=70%

Medical Benefits

	MILD MR	MOD MR	SEV MR	MULTI HC	HEAR IMP	VIS IMP	BD	LD	TOTAL DISABLE	TOTAL NONHC
EMPLOYED	n=4	n=2	n=2	n=1	n=1	n=0	n=2	n=15	n=27	n=30
Employer Paid:	1=25%						2=100%	10=67%	13=48%	18=60%
Parent's Coverage:	2=50%								2=7%	
Self Covered:			1=50%					1=7%	2=7%	1=3%
Spouse's Coverage:										3=10%
Coupons/Govt. Agency:		2=100%	1=50%	1=100%					4=15%	3=10%
No Coverage:								2=13%	2=7%	2=7%
Unknown:	1=25%				1=100%			2=13%	4=15%	6=20%
UNEMPLOYED	n=3	n=1	n=0	n=1	n=1	n=1	n=0	n=4	n=11	n=4
Self Coverage:										1=25%
Spouse's Coverage:								2=50%	2=18%	1=25%
Coupons/Govt. Agency:	1=33%			1=100%	1=100%	1=100%			4=36%	
No Coverage:	1=33%	1=100%						2=50%	4=36%	2=50%
Missing:	1=33%								1=9%	

Other Benefits Received with Current Employment

	MILD MR n=4	MODERATE MR n=2	SEVERE MR n=2	MULTI HC n=1	HEARING IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=15	TOTAL DISABLED n=27	TOTAL NONHC n=30
VACATION									
YES:	3=75%	1=50%	1=50%	1=100%		2=100%	12=80%	20=74%	20=67%
NO:		1=50%	1=50%		1=100%			3=11%	4=13%
UNKNOWN:	1=25%						3=20%	4=15%	6=20%
SICK LEAVE									
YES:	3=75%		1=50%	1=100%		2=100%	10=67%	17=63%	21=70%
NO:	1=25%	2=100%	1=50%		1=100%		2=13%	7=26%	3=10%
UNKNOWN:							3=20%	3=11%	6=20%
RETIRMENT									
YES:						2=100%	7=46%	9=33%	16=53%
NO:	1=25%	2=100%	2=100%	1=100%	1=100%		4=27%	11=41%	7=23%
UNKNOWN:	3=75%						4=27%	7=26%	7=23%

Currently Unengaged
(Not in School and Not Working)

	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEARING IMPAIR n=2	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=34
YES:	3=43%					1=100%		3=16%	7=15%	3=9%
NO:	4=57%	3=100%	2=100%	2=100%	2=100%		2=100%	16=84%	31=82%	31=91%

Other Income Received*

	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEAR IMP n=2	VISUAL IMP n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=34
SSI:		2	1	2	1				6	
SSA:	1					1			2	
Student Scholarship:	1								1	
Student Loan:					1				1	1
DVR					1				1	
Labor & Industry:										1
Unemploy Insurance:								1	1	2
Other:										2

* Results are not exclusive; a graduate may receive more than one other outside income.

Graduate's Marital Status

	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEARING IMPAIR n=2	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=34
Never Married	4=57%	2=67%	1=50%	2=100%	2=100%	1=100%	1=50%	11=58%	24=63%	18=53%
Currently Married	2=29%						1=50%	8=42%	11=29%	16=47%
Was Married		1=33%	1=50%						2=5%	
Missing:	1=14%								1=3%	

Does Graduate Have Children

Children	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEARING IMPAIR n=2	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=34
0:	6=86%	3=100%	1=50%	2=100%	2=100%	1=100%	1=50%	14=74%	30=79%	25=73%
1:								3=16%	3=8%	7=21*%
2:	1=14%		1=50%					1=5%	3=8%	1=3%
3:							1=50%	1=5%	2=5%	1=3%

* 3 Nonhandicapped graduates are not living with their child.

Graduate's Current Residence

	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEARING IMPAIR n=2	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=36
Parent's Home:	2=29%	1=33%	1=50%					2=11%	6=16%	4=12%
On own in House,Apt:	5=71%	1=33%			2=100%	1=100%	2=100%	16=84%	27=71%	30=88%
Travelling:								1=5%	1=3%	
Supervised Setting:		1=33%	1=50%	1=50%					3=8%	
Tenant Support:				1=50%					1=3%	

Satisfaction with Overall Life Situation

	MILD MR n=7	MOD MR n=3	SEV MR n=2	MULTI HC n=2	HEARING IMPAIR n=2	VISUAL IMPAIR n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=38	TOTAL NONHC n=34
Very Satisfied:	3=43%	2=67%		1=50%	1=50%		2=100%	11=58%	20=53%	23=67%
Somewhat Satisfied:	2=29%	1=33%	1=50%		1=50%			8=42%	13=34%	8=24%
Not Very Satisfied:			1=50%			1=100%			2=5%	1=3%
Not at All Satisfied:	1=14%			1=50%					2=5%	2=6%
Missing:	1=14%								1=3%	

March, 1995
Univ. of Wa.
Decade Project

FAMILY INFORMANT INFORMATION
BELLEVUE SCHOOL DISTRICT
1985 GRADUATES - YEAR 5
10 YEARS AFTER GRADUATION

	Health Impaired	Mild MR	Moderate MR	Severe MR	Multi HC	Behavior Disordered	Learning Disabled	Total HC	Total NonHC
POSSIBLE CONTACT:	4	4	5	2	4	2	19	40	47
TOTAL CONTACT:	4=100%	3=75%	5=100%	2=100%	4=100%	2=100%	19=100%	39=98%	47=100%
CURRENTLY IN SCHOOL:	0	0	0	0	0	1=50%	1=14%	2=5%	5=11%
EVER GRADUATE POST HIGH SCH.:	2=50%	0	0	0	0	0	13=68%	15=38%	33=70%
CURRENTLY EMPLOYED:	3=75%	1=33%	5=100%	1=50%	2=50%	1=50%	17=90%	30=77%	41=87%
SALARY* $180+/WEEK:	2=67%	1=100%	4=80%	0	0	1=100%	13=77%	21=70%	29=71%
SALARY** $180+/WEEK:	2=50%	1=33%	4=80%	0	0	1=50%	13=68%	21=54%	29=62%
CURRENTLY UNENGAGED:	1=25%	2=67%	0	1=50%	2=50%	0	1=5%	7=18%	4=8%
RESIDENCE									
FAMILY	3=75%	1=33%	2=40%	1=50%	1=25%		5=26%	13=33%	4=8%
SUPERVISED		1=33%	3=60%	1=50%	3=75%			8=21%	
INDEPENDENT	1=25%	1=33%				2=100%	14=74%	18=46%	43=92%

* Salary percentages based on those graduates who are currently employed.
** Salary percentages based on entire graduate populations.
24% of all respondents did not answer salary question for those employed: 29% of the NonHC, 23% of the LD.

FAMILY INFORMANT INFORMATION
BELLEVUE SCHOOL DISTRICT
1985 GRADUATES - YEAR 5

10 YEARS AFTER GRADUATION

Gender

	HEALTH IMPAIR n=4	MILD MR n=3	MODERATE MR n=5	SEVERE MR n=2	MULTI HC n=4	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=39	TOTAL NONHC n=47
Male:	2=50%	2=67%	3=60%	1=50%	3=75%	1=50%	15=79%	27=69%	29=62%
Female:	2=50%	1=33%	2=40%	1=50%	1=25%	1=50%	4=21%	12=31%	18=38%

Currently in Post High School Education

	HEALTH IMPAIR n=4	MILD MR n=3	MODERATE MR n=5	SEVERE MR n=2	MULTI HC n=4	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=39	TOTAL NONHC n=47
YES:						1=50%	1=5%	2=5%	5=11%
NO:	4=100%	3=100%	5=100%	2=100%	4=100%	1=50%	18=95%	37=95%	42=89%

Type of Post High School Program Currently Attended

	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=1	TOTAL DISABLED n=2	TOTAL NONHC n=5
COMMUNITY COLLEGE:	1=100%	1=100%	2=100%	
UNIVERSITY/4 YR. SCHOOL:				4=80%
BUSINESS, VOC, TRADE SCHOOL:				1=20%

Ever Completed Post High School Program

	HEALTH IMPAIR n=4	MILD MR n=3	MODERATE MR n=5	SEVERE MR n=2	MULTI HC n=5	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=39	TOTAL NONHC n=47
YES:	2=50%	0					13=68%	15=38%	33=70%
NO:	2=50%	3=100%	5=100%	2=100%	5=100%	2=100%	6=32%	24=62%	14=30%

Degrees Received from Post High School Completion*

	HEALTH IMPAIR n=2	LEARNING DISABLED n=13	TOTAL DISABLED n=15	TOTAL NONHC n=33
ASSOCIATE'S DEGREE:	1	5	6	5
BACHELOR'S DEGREE:	1	1	2	26
MASTER'S DEGREE:				5
PH.D./ED.D./MD:				2
CERTIFICATE:	1	8	9	5
LICENSE:		1	1	1

* A graduate may have received more than one type of degree.

Currently Employed

	HEALTH IMPAIR n=4	MILD MR n=3	MODERATE MR n=5	SEVERE MR n=2	MULTI HC n=4	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=39	TOTAL NONHC n=47
YES:	3=75%	1=33%	5=100%	1=50%	2=50%	1=50%	17=90%	30=77%	41=87%
NO:	1=25%	2=67%		1=50%	2=50%	1=50%	2=10%	9=23%	6=13%

Hours per Week for Current Employment

	HEALTH IMPAIR n=3	MILD MR n=1	MOD MR n=5	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=17	TOTAL DISABLED n=30	TOTAL NONHC n=41
PART TIME/ LT 40 HRS.:	2=67%	1=100%	1=20%	1=100%	2=100%		1=6%	12=35%	3=7%
FULL TIME/ 40 HRS.+:	1=33%		4=80%			1=100%	13=88%	22=65%	37=90%
MISSING:							1=6%		1=3%

Salary per Week for Current Employment

	HEALTH IMPAIR n=3	MILD MR n=1	MOD MR n=5	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=17	TOTAL DISABLED n=30	TOTAL NONHC n=41
LT $180.00 PER WEEK:	1=33%			1=100%	2=100%			4=13%	
$180+ PER WEEK:	2=67%	1=100%	4=80%			1=100%	13=77%	21=70%	29=71%
MISSING:			1=20%				4=23%	5=17%	12=29%

Medical Benefits

	HEALTH IMPAIR	MILD MR	MOD MR	SEVERE MR	MULTI HC	BD	LD	TOTAL DISABLED	TOTAL NONHC
EMPLOYED	n=3	n=1	n=5	n=1	n=2	n=1	n=17	n=30	n=41
Employer Paid:	2=67%		4=80%			1=100%	10=59%	17=57%	26=63%
Parent's Coverage:	1=33%							1=3%	1=2%
Self Covered:							2=12%	2=7%	4=10%
Spouse's Coverage:							1=6%	1=3%	5=12%
Coupons/Govt. Agency:				1=100%	2=100%			3=10%	
No Coverage:		1=100%					3=17%	4=13%	1=2%
Missing:			1=20%				1=6%	2=7%	4=10%
UNEMPLOYED	n=1	n=2	n=0	n=1	n=2	n=1	n=2	n=9	n=6
Parent's Coverage:	1=100%					1=100%		2=22%	1=17%
Spouse's Coverage:									2=33%
Coupons/Govt. Agency:		2=100%		1=100%	2=100%		1=50%	6=67%	
No Coverage:							1=50%	1=11%	2=33%
Missing:									1=17%

Other Benefits Received with Current Employment

	HEALTH IMPAIR n=3	MILD MR n=1	MOD MR n=5	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=17	TOTAL DISABLED n=30	TOTAL NONHC n=41
VACATION									
YES:	2=67%		5=100%	1=100%	2=100%	1=100%	10=59%	21=70%	28=68%
NO:	1=25%	1=100%					3=18%	5=17%	6=15%
MISSING:							4=23%	4=13%	7=17%
SICK LEAVE									
YES:	2=67%		5=100%	1=100%		1=100%	9=53%	18=60%	27=66%
NO:	1=25%	1=100%			2=100%		3=18%	7=23%	5=12%
MISSING:							5=29%	5=17%	9=32%
RETIRMENT									
YES:	2=67%		5=100%			1=100%	8=47%	16=53%	19=46%
NO:	1=25%	1=100%		1=100%	2=100%		7=41%	12=40%	15=37%
MISSING:							2=12%	2=7%	7=17%

Currently Unengaged
(Not in School and Not Working)

	HEALTH IMPAIR n=4	MILD MR n=3	MODERATE MR n=5	SEVERE MR n=2	MULTI HC n=4	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=39	TOTAL NONHC n=47
YES:	1=25%	2=67%	0	1=50%	2=50%	0	1=5%	7=18%	4=8%
NO:	3=75%	1=33%	5=100%	1=50%	2=50%	2=100%	18=95%	32=82%	43=92%

Other Income Received*

	HEALTH IMPAIR n=4	MILD MR n=4	MOD MR n=5	SEVERE MR n=2	MULTI HC n=4	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=40	TOTAL NONHC n=47
SSI:		2	2	2	2			8	
SSA:			1		2			3	
Student Aid/ Scholarship:						1		1	1
Student Loan:									1
Unemployment Insurance:									1
Aid for Dependnt Child:							1	1	
Missing:									1

* Results are not exclusive; a graduate may receive more than one other outside income.

Graduate's Marital Status

	HEALTH IMPAIR n=4	MILD MR n=3	MODERATE MR n=5	SEVERE MR n=2	MULTI HC n=4	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=39	TOTAL NONHC n=47
Never Married	3=75%	2=67%	5=100%	2=100%	4=100%	2=100%	14=74%	32=82%	29=62%
Currently Married	1=25%	1=33%					3=16%	5=13%	18=38%
Yes Live w/Spouse	1=100%	1=100%					3=100%	5=100%	17=94%
Was Married							2=10%	2=5%	

Does Graduate Have Children

Children	HEALTH IMPAIR n=4	MILD MR n=3	MODERATE MR n=5	SEVERE MR n=2	MULTI HC n=4	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=39	TOTAL NONHC n=47
0:	3=75%	2=67%	5=100%	2=100%	4=100%	2=100%	15=79%	33=85%	41=87%
1:	1=25%	1=33%*					2=10%	4=10%	5=11%
2:							2=10%	2=5%	1=2%

* The Mild MR graduate's child does not live with him/her.

Graduate's Current Residence

	HEALTH IMPAIR n=4	MILD MR n=3	MODERATE MR n=5	SEVERE MR n=2	MULTI HC n=4	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=39	TOTAL NONHC n=47
Parent's Home:	3=75%	1=33%	2=40%	1=50%	1=25%		5=26%	13=33%	4=8%
On own in House,Apt:	1=25%	1=33%				2=100%	14=74%	18=46%	43=92%
Tenant Support:		1=33%						1=3%	
Supervised Setting:			3=60%	1=50%	3=75%			7=18%	

Satisfaction with Overall Life Situation

	HEALTH IMPAIR n=4	MILD MR n=3	MODERATE MR n=5	SEVERE MR n=2	MULTI HC n=4	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=19	TOTAL DISABLED n=39	TOTAL NONHC n=47
Very Satisfied:	2=50%		2=40%	1=50%	2=50%	1=50%	9=47%	20=50%	33=70%
Somewhat Satisfied:		1=33%	3=60%		2=50%	1=50%	9=47%	15=38%	11=23%
Not Very Satisfied:	2=50%	1=33%		1=50%				4=10%	1=2%
Not at All Satisfied:		1=33%					1=5%	1=2%	1=2%
Missing:									1=2%

Appendix 3

Example of Summary Provided to Districts

Seattle 1985 Cohort - Year 2 Interview Summary

Eugene Edgar • July,1992

These data are for all 1985 special education graduates and a random sample of nondisabled graduates. The data were gathered from telephone interviews with a parent as informant. The data were collected in January - March, 1992 (6.5 years after graduation from high school).

Contact Rate. Of the total 150 special education graduates, data were collected on 81(54% of the orginal population). This was 92% of the population from the data collected in 1991. For the nondisabled students the contact was 84 of 181 (46%). This was 90% of the population from the data collected in 1991. These need to be considered low contact rates for the overall population, but high rates from 1991 to 1992. We cannot be sure if the graduates for whom we have data are comparable to those for whom we have no data. Our suspicion is that our contacted graduates are doing better than those we were not able to contact.

Post-Secondary Schooling. For the nondisabled students, 56% have completed (and graduated) from some form of post secondary educational program and 29% are currently enrolled in such a program. For the LD grads, 30% have completed a program and 10% are currently enrolled.

Employment. A lower percentage of LD grads (78%) were employed as compared to the nondisabled grads (88%). Compared to last year this is an increase for the nondisabled grads and a steady state for the LD grads. The other disability groups fared less well. For those employed, the special education grads earned at least an equivilant salary to the nondisabled grads.

Unengaged. This refers to grads who were neither in school nor employed. While only 4% of the nondisabled grads were unengaged, 18% of the LD grads were unengaged, with even higher rates for the other disability groups.

Residence. An equal percentage of nondisabled grads (63%), LD grads (68%), and BD grads (67%) were living independently. Other categories of disabled grads were less independent.

Gene/ Seattle Cohort

June, 1992
Univ. of Wa.
Decade Project

FAMILY INFORMANT INFORMATION
SEATTLE SCHOOL DISTRICT
1985 GRADUATES - YEAR 2

	Orthopedic Impaired	Health Impaired	Mild MR	Moderate MR	Severe MR	Multi HC	Hearing Impaired	Behavior Disordered	Learning Disabled	Total HC	Total NonHC
POSSIBLE CONTACT:	2	1	9	7	3	4	4	3	55	88	93
TOTAL CONTACT:	**2=100%**	**0**	**8=89%**	**7=100%**	**3=100%**	**4=100%**	**4=100%**	**3=100%**	**50=91%**	**81=92%**	**84=90%**
CURRENTLY IN SCHOOL:	0		1=12%	2=29%	0	1=25%	0	0	5=10%	9=11%	24=29%
EVER GRADUATE POST H.S.:	0		1=12%	0	0	0	1=25%	1=33%	15=30%	18=22%	47=56%
CURRENTLY EMPLOYED:	1=50%		4=50%	4=57%	1=33%	0	2=50%	1=33%	39=78%	52=64%	74=88%
SALARY* $180+/WEEK:	1=100%		2=50%	0	0	0	2=100%	1=100%	20=51%	26=50%	38=51%
SALARY** $180+/WEEK:	1=50%		2=25%	0	0	0	2=50%	1=33%	20=40%	26=32%	38=45%
CURRENTLY UNENGAGED:	1=50%		3=38%	2=29%	2=67%	3=75%	2=50%	2=67%	9=18%	24=30%	3=4%
RESIDENCE											
FAMILY	1=50%		4=50%	2=29%	2=67%	2=50%	2=50%		16=32%	29=36%	30=36%
SUPERVISED			1=12%	5=71%	1=33%	2=50%		1=33%		10=12%	1=1%
INDEPENDENT	1=50%		3=38%				2=50%	2=67%	34=68%	42=52%	53=63%

* Salary percentages based on those graduates who are currently employed.
** Salary percentages based on entire graduate populations.

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FAMILY INFORMANT INFORMATION
SEATTLE SCHOOL DISTRICT
1985 GRADUATES - YEAR 2

Gender

	ORTH IMPAIR n=2	MILD MR n=8	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=4	BD n=3	LD n=50	TOTAL HC n=81	TOTAL NONHC n=84
Male:		5=63%	3=43%		2=50%	4=100%	3=100%	31=62%	48=59%	55=66%
Female:	2=100%	3=37%	4=57%	3=100%	2=50%			19=38%	33=41%	29=34%

Currently in Post High School Education

	ORTH IMPAIR n=2	MILD MR n=8	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=4	BD n=3	LD n=50	TOTAL HC n=81	TOTAL NONHC n=84
YES:		1=12%	2=29%		1=25%			5=10%	9=11%	24=29%
NO:	2=100%	7=88%	5=71%	3=100%	3=75%	4=100%	3=100%	44=88%	71=88%	59=70%
UNK:								1=2%	1=1%	1=1%

Type of Post High School Program Currently Attended

	MILD MR n=1	MOD MR n=2	MULTI HC n=1	LD n=5	TOTAL HC n=9	TOTAL NONHC n=24
Community College:		1=50%	1=100%	1=20%	3=33%	5=21%
University or 4 Yr School:				1=20%	1=11%	13=54%
Business, Voc, or Trade School:				3=60%	3=33%	4=17%
Living skills Program:		1=50%			1=11%	
Other:	1=100%				1=11%	1=4%
Unknown/Refused:						1=4%

Year 1 Post High School Program Completed

	MILD MR n=2	MOD MR n=2	LD n=8	TOTAL HC n=12	TOTAL NONHC n=33
YES:			3=37%	3=25%	10=30%
NO:	2=100%	2=100%	5=63%	9=75%	23=70%

Degree Received from Year 1 Post High School Institution Completed

	LD n=3	TOTAL HC n=5	TOTAL NONHC n=10
Diploma:	1=33%	1=33%	
Associate's Degree:	1=33%	1=33%	2=10%
Bachelor's Degree:			7=70%
Master's Degree:			1=10%
Unknown/Refused:	1=33%	1=33%	2=11%

Completed Other Post High School Program Since Year 1

	ORTH IMPAIR n=2	MILD MR n=8	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=4	BD n=3	LD n=50	TOTAL HC n=81	TOTAL NONHC n=84
YES:								1=2%	1=1%	5=6%
NO:	2=100%	8=100%	7=100%	3=100%	4=100%	4=100%	3=100%	47=94%	78=97%	79=94%
UNK:								2=4%	2=2%	

Type of Other Post High School Program Completed Since Year 1

	LD n=1	TOTAL HC n=1	TOTAL NONHC n=5
Community College:	1=100%	1=100%	1=20%
University or 4 Yr School:			1=20%
Business,Voc, Trade Sch:			2=40%
Military Schooling:			1=20%

Degree Received from Other Post High School Institution Completed Since Year 1

	LD n=1	TOTAL HC n=1	TOTAL NONHC n=5
Bachelor's Degree:			1=20%
Certificate:	1=100%	1=100%	4=80%

Currently Employed

	ORTH IMPAIR n=2	MILD MR n=8	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=4	BD n=3	LD n=50	TOTAL HC n=81	TOTAL NONHC n=84
YES:	1=50%	4=50%	4=57%	1=33%		2=50%	1=33%	39=78%	52=64%	74=88%
NO:	1=50%	4=50%	3=43%	2=67%	4=100%	2=50%	2=67%	10=20%	28=35%	10=12%
UNK:								1=2%	1=1%	

Hours per Week for Current Employment

	ORTH IMPAIR n=1	MILD MR n=4	MOD MR n=4	SEV MR n=1	HEAR IMPAIR n=2	BD n=1	LD n=39	TOTAL HC n=52	TOTAL NONHC n=74
PART TIME/ LT 40 HRS.:		1=25%	2=50%	1=100%	1=50%		6=16%	11=21%	16=22%
FULL TIME/ 40 HRS.+:	1=100%	2=50%	1=25%		1=50%	1=100%	29=74%	35=67%	52=70%
UNKNOWN:		1=25%	1=25%				4=10%	6=12%	6=8%

Salary per Week for Current Employment

	ORTH IMPAIR n=1	MILD MR n=4	MOD MR n=4	SEV MR n=1	HEAR IMPAIR n=2	BD n=1	LD n=39	TOTAL HC n=52	TOTAL NONHC n=74
LT $180.00 PER WEEK:		1=25%	2=50%	1=100%			3=8%	16=14%	4=5%
$180+ PER WEEK:	1=100%	2=50%			2=100%	1=100%	20=51%	60=53%	38=52%
UNKNOWN:		1=25%	2=50%				16=41%	38=33%	32=43%

Medical Benefits for Those Currently Employed

	ORTH IMPAIR n=1	MILD MR n=4	MOD MR n=4	SEV MR n=1	HEAR IMPAIR n=2	BD n=1	LD n=39	TOTAL HC n=52	TOTAL NONHC n=74
RECEIVED									
YES:	1=100%	3=75%	4=100%	1=100%	2=100%	1=100%	28=72%	40=77%	55=74%
NO:		1=25%					9=23%	10=19%	15=20%
UNKNOWN:							2=5%	2=4%	4=6%
JOB RELATED	n=1	n=3	n=4	n=1	n=2	n=1	n=28	n=40	n=55
YES:	1=100%	2=67%			2=100%	1=100%	21=75%	27=68%	46=83%
NO:		1=33%	4=100%	1=100%			5=18%	11=28%	8=15%
UNKNOWN:							2=7%	2=4%	1=2%
FULLY PAID FOR	n=1	n=2	n=0	n=0	n=2	n=1	n=21	n=27	n=46
YES:	1=100%	1=50%			1=50%	1=100%	12=57%	16=59%	26=57%
NO:					1=50%		3=14%	4=15%	5=11%
UNKNOWN:		1=50%					6=29%	7=26%	15=32%

Other Benefits Received with Current Employment

	ORTH IMPAIR n=1	MILD MR n=4	MOD MR n=4	SEV MR n=1	HEAR IMPAIR n=2	BD n=1	LD n=39	TOTAL HC n=52	TOTAL NONHC n=74
VACATION									
YES:	1=100%	1=25%	1=25%	1=100%	2=100%	1=100%	22=56%	29=56%	44=59%
NO:		2=50%	2=50%				7=18%	11=21%	16=22%
UNKNOWN:		1=25%	1=25%				10=26%	12=23%	14=19%
SICK LEAVE									
YES:	1=100%	1=25%		1=100%	2=100%	1=100%	15=38%	21=40%	36=49%
NO:		2=50%	3=75%				9=23%	14=27%	16=21%
UNKNOWN:		1=25%	1=25%				15=39%	17=33%	22=30%
RETIRMENT									
YES:	1=100%			1=100%	2=100%	1=100%	14=36%	19=36%	27=36%
NO:		3=75%	3=75%				11=28%	17=33%	27=36%
UNKNOWN:		1=25%	1=25%				14=36%	16=31%	20=27%

Graduate's Marital Status

	ORTH IMPAIR n=2	MILD MR n=8	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=4	BD n=3	LD n=50	TOTAL HC n=81	TOTAL NONHC n=84
Never Married	2=100%	8=100%	7=100%	3=100%	4=100%	4=100%	2=67%	32=64%	62=77%	71=85%
Current Married							1=33%	15=30%	16=20%	12=14%
Was Married								2=4%	2=2%	1=1%
Unk/ Refused								1=2%	1=1%	

Does Graduate Have Children

	ORTH IMPAIR n=2	MILD MR n=8	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=4	BD n=3	LD n=50	TOTAL HC n=81	TOTAL NONHC n=84
NO Child	2=100%	7=88%	7=100%	3=100%	4=100%	4=100%	2=67%	36=72%	61=80%	74=88%
YES Child		1=12%					1=33%	14=28%	16=20%	10=12%

Other Income Received*

	ORTH IMPAIR n=2	MILD MR n=8	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=4	BD n=3	LD n=50	TOTAL HC n=81	TOTAL NONHC n=84
SSI/SAG:	2	2	5	2	4	1	1	3	20	
Veteran's Benefits:										2
SSA:			2	1					3	
Public Assist.:		1	1	1				3	6	1
Student Loan:										2
Unemp. Insurance								1	1	

* Results are not exclusive; a graduate may receive more than one other outside income.

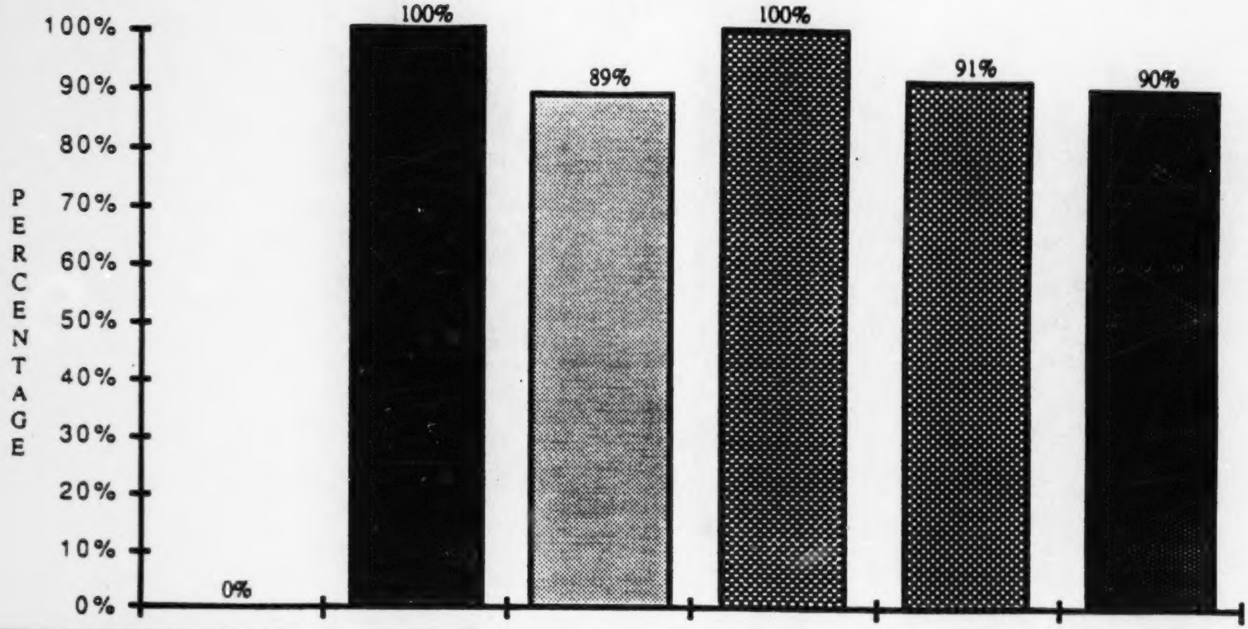
Satisfaction with Overall Life Situation

	ORTH IMPAIR n=2	MILD MR n=8	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=4	BD n=3	LD n=50	TOTAL HC n=81	TOTAL NONHC n=84
Very Satisfied:	2=100%	1=12%	2=29%		1=25%	1=25%	2=67%	26=52%	65=41%	57=68%
Somewhat Satisfied:		3=38%	5=71%	1=33%	1=25%	1=25%		15=30%	63=39%	15=18%
Not Very Satisfied:		2=25%		1=33%	2=50%	1=25%		5=10%	21=13%	8=9%
Not at All Satisfied:		2=25%				1=25%	1=33%	3=6%	10=6%	3=4%
Unknown /Refused:				1=33%				1=2%	2=1%	1=1%

Graduate's Current Residence

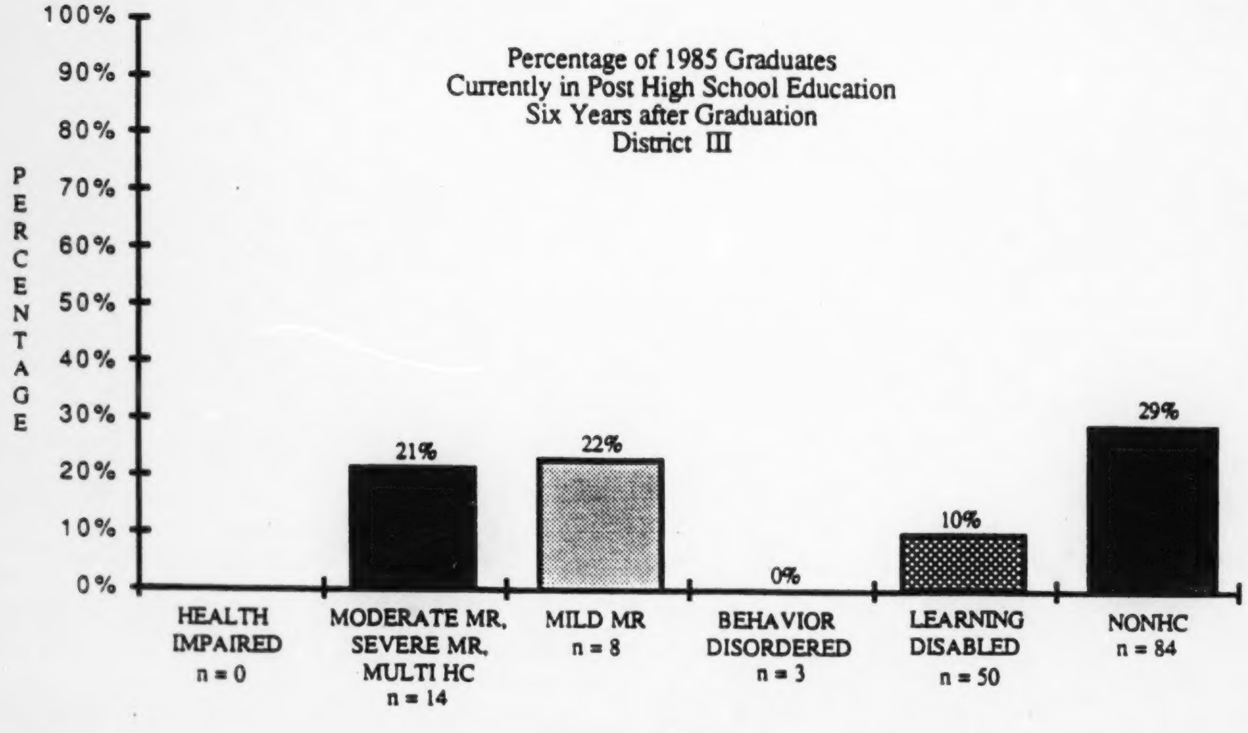
	ORTH IMPAIR n=2	MILD MR n=8	MOD MR n=7	SEV MR n=3	MULTI HC n=4	HEAR IMPAIR n=4	BD n=3	LD n=50	TOTAL HC n=81	TOTAL NONHC n=84
Parent's Home:	1=50%	3=38%	2=29%	2=67%	2=50%	2=50%		16=32%	28=35%	26=31%
With other Relatives:		1=12%							1=1%	4=5%
On own in House,Apt	1=50%	2=25%				1=25%	2=67%	32=64%	38=47%	50=60%
Supervised Setting:			4=57%		2=50%		1=33%		7=9%	
Tenant Support:			1=14%	1=33%					2=2%	
Prison / Detent Hm		1=12%							1=1%	1=1%
Work Site:		1=12%							1=1%	1=1%
Travelling, no address:						1=25%			1=1%	
Dormitory /Barracks:										1=1%
Unknown /Refused:								2=4%	2=2%	1=1%

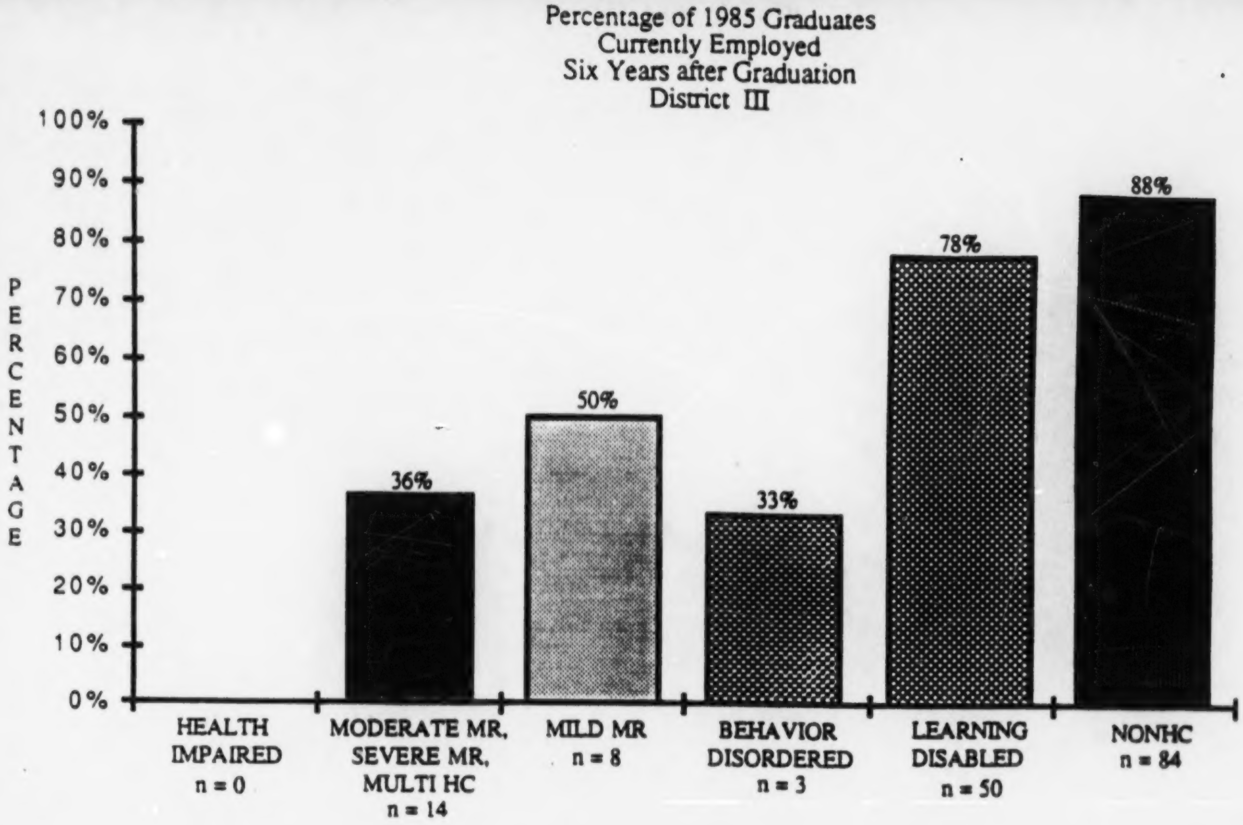
Percentage of 1985 Graduates Contacted
Six Years after Graduation
District III

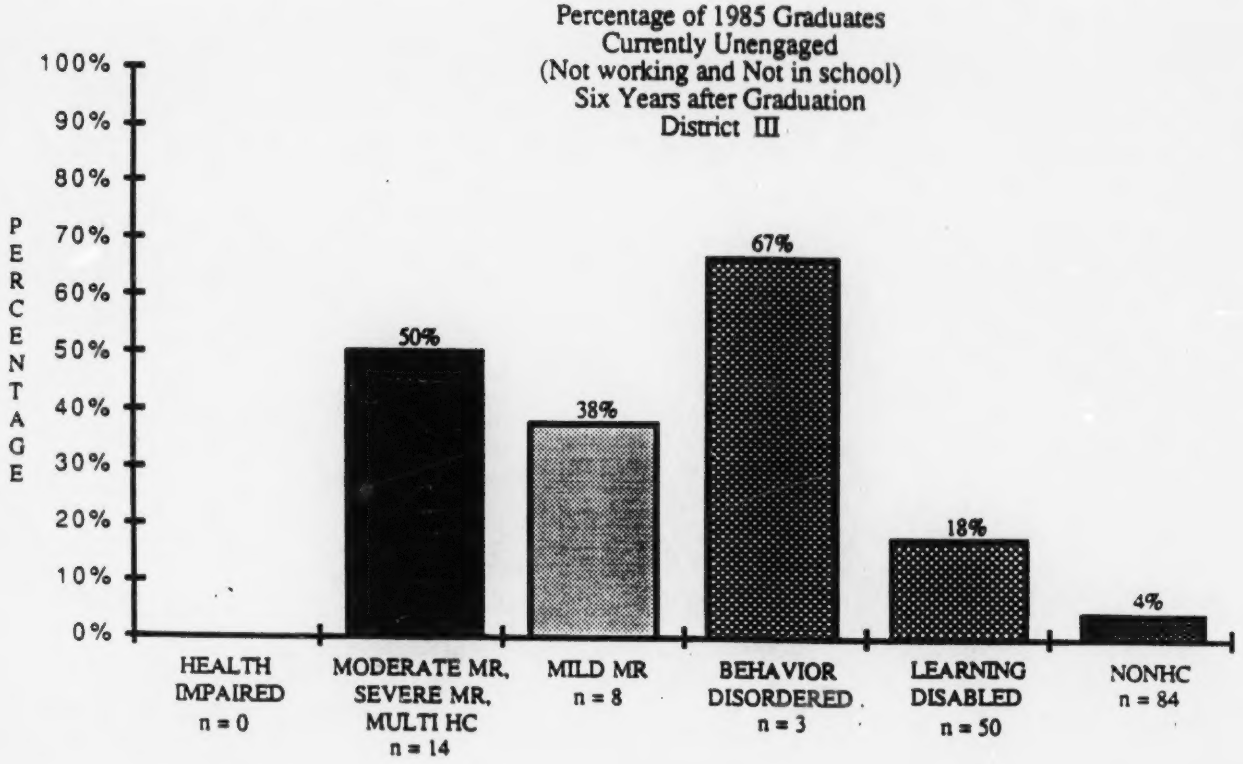


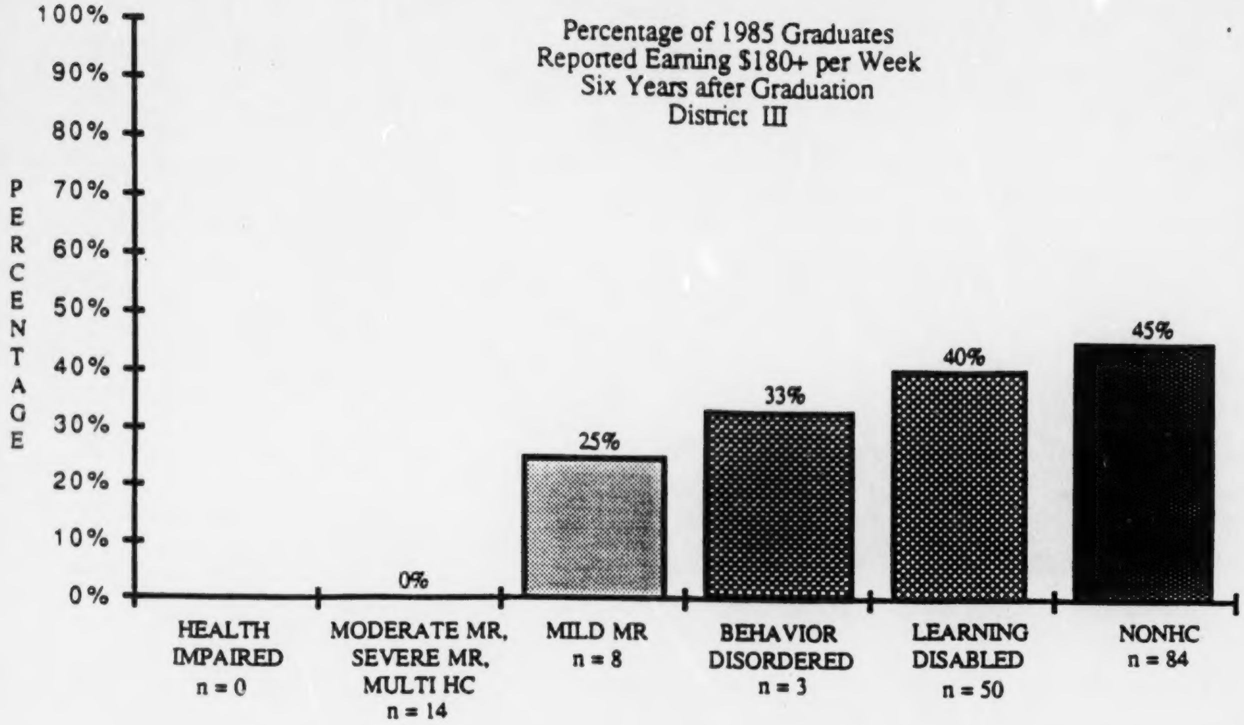
	HEALTH IMPAIRED	MODERATE MR, SEVERE MR, MULTI HC	MILD MR	BEHAVIOR DISORDERED	LEARNING DISABLED	NONHC
TOTAL POSSIBLE	1	14	9	3	55	93
TOTAL CONTACT	0	14	8	3	50	84

Percentage of 1985 Graduates
Currently in Post High School Education
Six Years after Graduation
District III



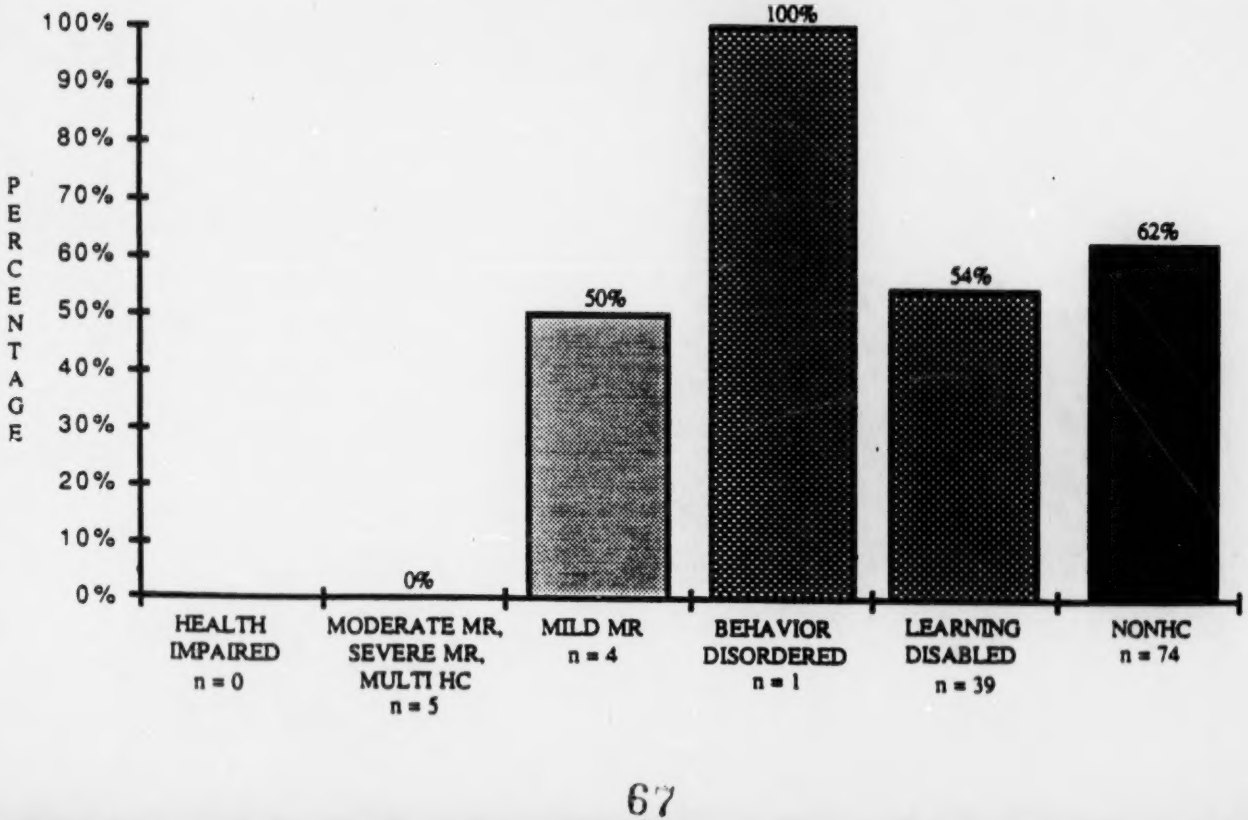

Percentage of 1985 Graduates
Currently Employed
Six Years after Graduation
District III

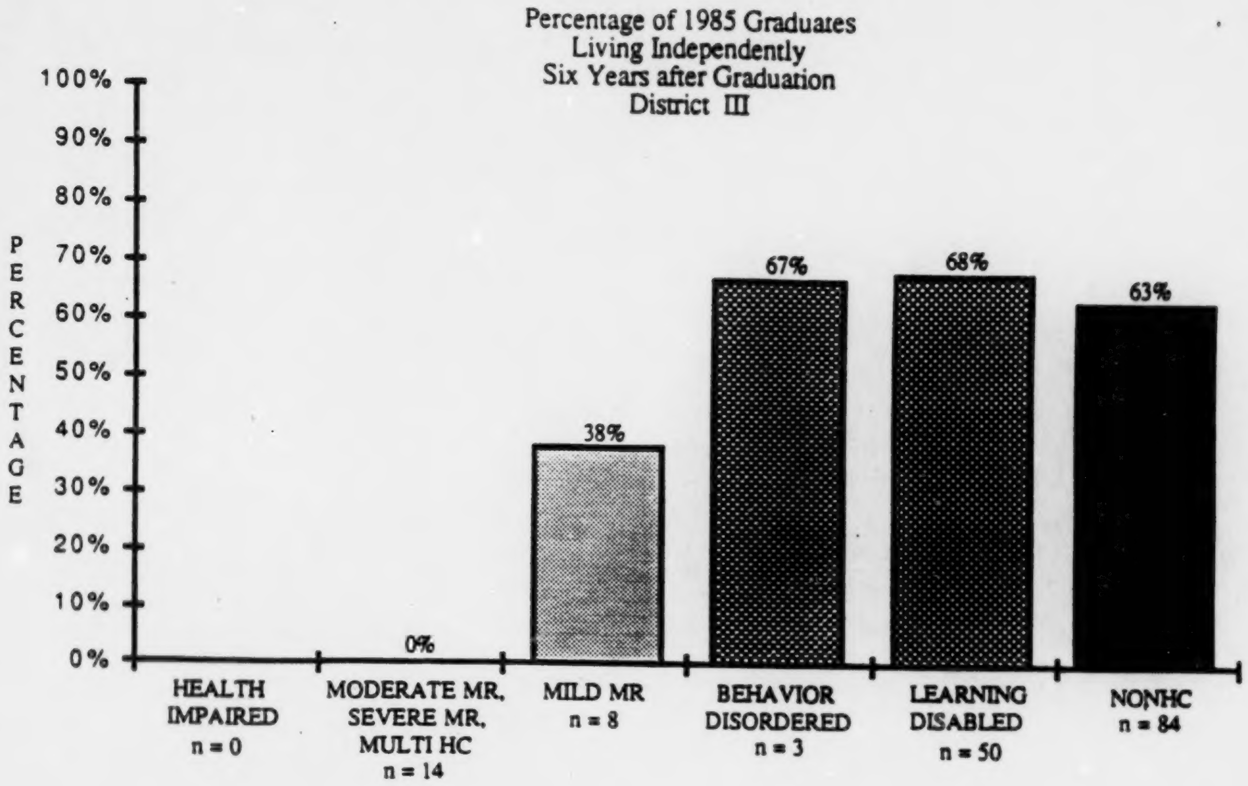

Percentage of 1985 Graduates
Currently Unengaged
(Not working and Not in school)
Six Years after Graduation
District III



Percentage of 1985 Graduates
Reported Earning $180+ per Week
Six Years after Graduation
District III

Percentage of 1985 Graduates
Reported Receiving Medical Benefits
From Their Employer
Six Years after Graduation
District III





Percentage of 1985 Graduates
Living Independently
Six Years after Graduation
District III

Appendix 4

Year 5 Summaries
1990 Cohort

FAMILY INFORMANT INFORMATION

TOTAL 1990 GRADUATES - YEAR 5
5 YEARS AFTER GRADUATION

	Orthopedic Impaired	Health Impair	Mild MR	Moderate MR	Severe MR	Multi HC	Hearing Impaired	Behavior Disordered	Learning Disabled	Total HC	Total NonHC
POSSIBLE CONTACT:	5	5	13	16	2	8	5	13	84	151	161
TOTAL CONTACT:	**4=80%**	**5=100%**	**12=92%**	**16=100%**	**2=100%**	**8=100%**	**5=100%**	**13=100%**	**82=98%**	**147=97%**	**161=100%**
CURRENTLY IN SCHOOL:	1=25%	1=20%	0	4=25%	1=50%	2=25%	2=40%	2=15%	20=24%	33=22%	70=43%
EVER GRADUATE POST HIGH SCH.:	2=50%	2=40%	1=8%	5=31%	0	1=12%	3=60%	3=23%	18=22%	35=24%	71=44%
CURRENTLY EMPLOYED:	1=25%	3=60%	6=50%	8=50%	1=50%	2=25%	2=40%	8=62%	57=70%	88=60%	127=79%
SALARY* $180+/WEEK:	0	1=33%	5=83%	0	0	0	1=50%	6=75%	29=51%	42=48%	73=57%
SALARY** $180+/WEEK:	0	1=20%	5=42%	0	0	0	1=20%	6=46%	29=35%	42=28%	73=45%
CURRENTLY UNENGAGED:	2=50%	1=20%	6=50%	6=37%	0	4=50%	1=20%	4=31%	16=19%	40=27%	7=4%
RESIDENCE											
FAMILY:	1=25%	1=20%	7=59%	10=63%	0	1=12%	2=40%	9=69%	36=44%	67=45%	54=34%
SUPERVISED:	2=50%	0	1=8%	6=37%	2=100%	6=75%	0	1=8%	2=2%	20=14%	0
INDEPENDNT:	1=25%	4=80%	4=33%	0	0	1=12%	3=60%	3=23%	44=54%	60=41%	107=66%

* Salary percentages based on those graduates who are currently employed.
** Salary percentages based on entire graduate populations.
24% of all respondents did not answer salary question for those employed: 25% of the NonHC, 30% of the LD.

FAMILY INFORMANT INFORMATION
TOTAL 1990 GRADUATES - YEAR 5

5 YEARS AFTER GRADUATION

Gender

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
Male:	3=75%	4=80%	5=42%	9=56%	1=50%	5=63%	2=40%	10=77%	64=78%	103=70%	101=63%
Female:	1=25%	1=20%	7=58%	7=44%	1=50%	3=37%	3=60%	3=23%	18=22%	44=30%	60=37%

Currently in Post High School Education

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
YES:	1=25%	1=20%		4=25%	1=50%	2=25%	2=40%	2=15%	20=24%	33=22%	70=43%
NO:	3=75%	4=80%	12=100%	12=75%	1=50%	6=75%	3=60%	11=85%	62=76%	114=78%	91=57%

Type of Post High School Program Currently Attended

	ORTH IMPAIR n=1	HEALTH IMPAIR n=1	MOD MR n=4	SEVERE MR n=1	MULTI HC n=2	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=20	TOTAL DISABLED n=33	TOTAL NONHC n=70
JOB SKILLS PROGRAM:				1=100%					1=3%	
SOCIAL SKILLS PROGRAM:			3=75%		2=100%				5=15%	
COMMUNITY COLLEGE:	1=100%	1=100%					2=100%	9=45%	13=39%	14=20%
UNIVERSITY / 4 YR. SCHOOL:						2=100%		6=30%	8=24%	52=74%
BUSINESS, TRADE SCHOOL:								3=15%	3=9%	3=4%
JOB CORPS PROGRAM:								1=5%	1=3%	
OTHER:			1=25%					1=5%	2=6%	1=2%

Ever Completed Post High School Program

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
YES:	2=50%	2=40%	1=8%	5=31%		1=12%	3=60%	3=23%	18=22%	35=24%	71=44%
NO:	2=50%	3=60%	11=92%	11=69%	2=100%	7=88%	2=40%	10=77%	64=78%	112=76%	90=56%

Degrees Received from Post High School Completion*

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=2	MILD MR n=1	MODERATE MR n=5	MULTI HC n=1	HEARING IMPAIRED n=3	BEHAVIOR DISORDER n=3	LEARNING DISABLED n=18	TOTAL DISABLED n=35	TOTAL NONHC n=71
Associate's Degree:						1		1	2	22
Bachelor's Degree:	1	1						1	3	39
GED:				1					1	
Diploma:				2			1		3	1
Certificate:		1	1	1		2	2	11	18	14
License:								3	3	2
Unknown/Refused:	1			1	1			3	6	

* A graduate may have received more than one type of degree.

Currently Employed

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
YES:	1=25%	3=60%	6=50%	8=50%	1=50%	2=25%	2=40%	8=62%	57=70%	88=60%	127=79%
NO:	3=75%	2=40%	6=50%	8=50%	1=50%	6=75%	3=60%	5=38%	25=30%	59=40%	34=21%

Hours per Week for Current Employment

	ORTHOPEDIC IMPAIRED n=1	HEALTH IMPAIRED n=3	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=2	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=8	LEARNING DISABLED n=57	TOTAL DISABLED n=88	TOTAL NONHC n=127
PART TIME/ LT 40 HRS.:	1=100%	1=33%	3=50%	8=100%	1=100%	2=100%		3=37%	19=33%	41=47%	74=58%
FULL TIME/ 40 HRS.+:		2=67%	3=50%				2=100%	5=63%	37=65%	46=53%	49=39%
MISSING:									1=2%		4=3%

Salary per Week for Current Employment

	ORTHOPEDIC IMPAIRED n=1	HEALTH IMPAIRED n=3	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=2	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=8	LEARNING DISABLED n=57	TOTAL DISABLED n=88	TOTAL NONHC n=127
LT $180.00 PER WEEK:	1=100%	1=33%	1=17%	8=100%	1=100%	2=100%		1=12%	11=19%	26=29%	22=17%
$180+ PER WEEK:		1=33%	5=83%				1=50%	6=75%	29=51%	42=48%	73=57%
MISSING:		1=33%					1=50%	1=12%	17=30%	20=23%	32=25%

Medical Benefits

	ORTH IMPAIR	HEALTH IMPAIRED	MILD MR	MODERATE MR	SEVERE MR	MULTI HC	HEARING IMPAIRED	BEHAVIOR DISORDER	LEARNING DISABLED	TOTAL DISABLED	TOTAL NONHC
EMPLOYED	n=1	n=3	n=6	n=8	n=1	n=2	n=2	n=8	n=57	n=88	n=127
Employer Paid:			1=17%	1=12%			2=100%	4=50%	25=44%	33=37%	56=44%
Parent's Coverage:		1=33%		2=25%					5=9%	8=9%	36=28%
Self Covered:	1=100%		2=33%					1=12%	2=3%	6=7%	5=4%
Spouse's Coverage:											2=2%
Coupons/Govt. Agency:		1=33%	2=33%	5=63%	1=100%	2=100%		1=12%	1=2%	13=15%	
No Coverage:		1=33%	1=17%					2=25%	16=28%	20=23%	18=14%
Unknown:									8=14%	8=9%	10=8%
UNEMPLOYED	n=3	n=2	n=6	n=8	n=1	n=6	n=3	n=5	n=25	n=59	n=34
Parent's Coverage:			1=17%	1=12%			2=67%	1=20%	7=28%	12=20%	21=62%
Self Coverage:		1=50%								1=2%	3=9%
Spouse's Coverage:									1=4%	1=2%	1=3%
Former Employer:											1=3%
Coupons/Govt. Agency:	3=100%		4=67%	7=88%	1=100%	6=100%	1=33%	2=40%	7=28%	31=52%	
No Coverage:		1=50%	1=17%					2=40%	10=40%	14=24%	8=23%

Other Benefits Received with Current Employment

	ORTHOPEDIC IMPAIRED n=1	HEALTH IMPAIRED n=3	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=2	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=8	LEARNING DISABLED n=57	TOTAL DISABLED n=88	TOTAL NONHC n=127
VACATION											
YES:			3=50%	2=25%		1=50%	2=100%	2=25%	28=49%	38=43%	64=50%
NO:	1=100%	2=67%	3=50%	6=75%	1=100%	1=50%		4=50%	17=30%	35=40%	52=41%
UNKNOWN:		1=33%						2=25%	12=21%	15=17%	11=9%
SICK LEAVE											
YES:			2=33%	2=25%		1=50%	2=100%	2=25%	21=37%	30=34%	59=46%
NO:	1=100%	2=67%	4=67%	5=63%	1=100%	1=50%		4=50%	25=44%	43=49%	52=41%
UNKNOWN:		1=33%		1=12%				2=25%	11=19%	15=17%	16=13%
RETIRMENT											
YES:			2=33%	2=25%			1=50%	1=12%	19=33%	25=28%	42=33%
NO:	1=100%	2=67%	4=67%	6=75%	1=100%	2=100%	1=50%	5=63%	29=51%	51=58%	61=48%
UNKNOWN:		1=33%						2=25%	9=16%	12=14%	24=19%

BEST COPY AVAILABLE

Currently Unengaged
(Not in School and Not Working)

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
YES:	2=50%	1=20%	6=50%	6=37%		4=50%	1=20%	4=31%	16=19%	40=27%	7=4%
NO:	2=50%	4=80%	6=50%	10=63%	2=100%	4=50%	4=80%	9=69%	66=81%	107=73%	154=96%

Other Income Received*

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
SSI:	3	1	5	11		8	1	3		32	
SSA:	1		2	1	2	1		2	1	10	
DVR:							2			2	
DDD:									1	1	
Welfare:			1					1		2	
Student Scholarship:									2	2	8
Student Loan:								1	2	3	17
Aid to Dependent Children:			1						2	3	
Unemployment Insurance:									1	1	3
Alimony/ Child Support:									2	2	
Veteran'sBenefits:											1
Military Reserves:									2	2	2
Other:				1						1	1

* Results are not exclusive; a graduate may receive more than one other outside income.

Graduate's Marital Status

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
Never Married	4=100%	5=100%	12=100%	16=100%	2=100%	8=100%	4=80%	13=100%	75=92%	139=95%	149=93%
Currently Married							1=20%		7=8%*	8=5%	12=7%

* 1 Learning Disabled graduate does not currently live with their spouse.

Does Graduate Have Children

Children	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
0:	4=100%	5=100%	6=50%	16=100%	2=100%	8=100%	5=100%	13=100%	61=74%	120=82%	151=94%
1:			5=42%*						15=18%*	20=13%	9=5%*
2:			1=8%						5=6%**	6=4%	1=1%**
3:									1=1%	1=1%	

* 3 Mild MR graduates, 9 Learning Disabled graduates, and 1 Nondisabled graduate do not currently live with their children.
** 1 Learning Disabled graduate and 1 Nondisabled graduate do not currently live with 1 of their 2 children.

Graduate's Current Residence

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
Parent's Home:	1=25%	1=20%	6=50%	8=50%		1=12%	2=40%	9=69%	34=42%	62=42%	51=32%
Other Relatives:			1=8%						2=2%	3=2%	3=2%
Foster Parents:				2=12%						2=1%	
On own in House,Apt:	1=25%	4=80%	4=33%			1=12%	2=40%	3=23%	40=49%	55=37%	98=61%
Dormitory, Barracks:							1=20%		2=2%	3=2%	7=4%
Employer Provided:									1=1%	1=1%	
Incarcerated:									1=1%	1=1%	
Supervised Setting:	2=50%			6=38%	2=100%	4=50%		1=8%	1=1%	16=11%	
Tenant Support:			1=8%			2=25%				3=2%	
Traveling:									1=1%	1=1%	2=1%

Satisfaction with Overall Life Situation

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=5	MILD MR n=12	MODERATE MR n=16	SEVERE MR n=2	MULTI HC n=8	HEARING IMPAIRED n=5	BEHAVIOR DISORDER n=13	LEARNING DISABLED n=82	TOTAL DISABLED n=147	TOTAL NONHC n=161
Very Satisfied:	1=25%		3=25%	3=19%	2=100%	5=63%	3=60%	3=23%	28=34%	48=33%	105=65%
Somewhat Satisfied:	1=25%	4=80%	4=33%	12=75%		1=12%	2=40%	7=54%	37=45%	68=46%	43=27%
Not Very Satisfied:	2=50%	1=20%	3=25%			2=25%		3=23%	8=10%	19=13%	9=6%
Not at All Satisfied:			2=17%	1=6%					9=11%	12=8%	4=2%

March, 1995
Univ. of Wa.
Decade Project

FAMILY INFORMANT INFORMATION
SEATTLE SCHOOL DISTRICT
1990 GRADUATES - YEAR 5
5 YEARS AFTER GRADUATION

	Orthopedic Impaired	Health Impaired	Mild MR	Moderate MR	Severe MR	Multi HC	Hearing Impaired	Behavior Disordered	Learning Disabled	Total Disabled	Total NonHC
POSSIBLE CONTACT:	5	2	6	8	1	1	4	7	36	70	68
TOTAL CONTACT:	**4=80%**	**2=100%**	**6=100%**	**8=100%**	**1=100%**	**1=100%**	**4=100%**	**7=100%**	**34=94%**	**67=96%**	**68=100%**
CURRENTLY IN SCHOOL:	1=25%	0	0	1=12%	1=100%	0	2=50%	2=29%	6=18%	13=19%	32=47%
EVER GRADUATE POST HIGH SCH.:	2=50%	1=50%	1=17%	3=37%	0	0	2=50%	1=14%	8=23%	18=27%	24=35%
CURRENTLY EMPLOYED:	1=25%	1=50%	3=50%	4=50%	0	0	2=50%	2=29%	22=65%	35=52%	53=78%
SALARY* $180+/WEEK:	0	0	2=67%	0	0	0	1=50%	1=50%	9=41%	13=37%	31=58%
SALARY** $180+/WEEK:	0	0	2=33%	0	0	0	1=25%	1=14%	9=26%	13=19%	31=45%
CURRENTLY UNENGAGED:	2=50%	1=50%	3=50%	4=50%	0	1=100%	0	4=57%	10=29%	25=37%	3=4%
RESIDENCE											
FAMILY:	1=25%	1=50%	4=67%	6=75%	0	0	1=25%	4=57%	13=38%	30=45%	24=35%
SUPERVISED:	2=50%	0	0	2=25%	1=100%	1=100%	0	1=14%	1=3%	8=12%	0
INDEPENDENT:	1=25%	1=50%	2=33%	0	0	0	3=75%	2=29%	20=59%	29=43%	44=65%

* Salary percentages based on those graduates who are currently employed.
** Salary percentages based on entire graduate populations.
28% of all respondents did not answer salary question for those employed: 23% of the NonHC, 45% of the LD.

FAMILY INFORMANT INFORMATION
SEATTLE SCHOOL DISTRICT
1990 GRADUATES - YEAR 5

5 YEARS AFTER GRADUATION

Gender

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
Male:	3=75%	2=100%	1=17%	6=75%	1=100%	1=100%	1=25%	4=57%	23=68%	42=63%	46=68%
Female:	1=25%		5=83%	2=25%			3=75%	3=43%	11=32%	25=37%	22=32%

Currently in Post High School Education

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
YES:	1=25%			1=12%	1=100%		2=50%	2=29%	6=18%	13=19%	32=47%
NO:	3=75%	2=100%	6=100%	7=88%		1=100%	2=50%	5=71%	28=82%	54=81%	36=53%

Type of Post High School Program Currently Attended

	ORTHOPEDIC IMPAIRED n=1	MODERATE MR n=1	SEVERE MR n=1	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=6	TOTAL DISABLED n=13	TOTAL NONHC n=32
JOB SKILLS PROGRAM:			1=100%				1=8%	
COMMUNITY COLLEGE:	1=100%				2=100%	1=17%	4=31%	8=25%
UNIVERSITY / 4 YR. SCHOOL:				2=100%		3=50%	5=38%	22=69%
BUSINESS/VOC TECH SCHOOL						1=17%	1=8%	2=6%
REMEDIAL SCHOOLING:		1=100%					1=8%	
OTHER:						1=17%	1=8%	

Ever Completed Post High School Program

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
YES:	2=50%	1=50%	1=17%	3=37%			2=50%	1=14%	8=23%	18=27%	24=35%
NO:	2=50%	1=50%	5=83%	5=63%	1=100%	1=100%	2=50%	6=86%	26=77%	49=73%	44=65%

Degrees Received from Post High School Completion*

	ORTHOPEDIC IMPAIRED n=2	HEALTH IMPAIRED n=1	MILD MR n=1	MODERATE MR n=3	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=8	TOTAL DISABLED n=17	TOTAL NONHC n=24
ASSOCIATE'S DEGREE:					1		1	2	7
BACHELOR'S DEGREE:	1							1	14
GED:				1				1	
DIPLOMA:				1				1	1
CERTIFICATE:		1	1		1	1	5	9	4
LICENSE:							2	2	1
UNKNOWN/REFUSED:	1			1			1	3	

* A graduate may have received more than one type of degree.

Currently Employed

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
YES:	1=25%	1=50%	3=50%	4=50%			2=50%	2=29%	22=65%	35=52%	53=78%
NO:	3=75%	1=50%	3=50%	4=50%	1=100%	1=100%	2=50%	5=71%	12=35%	32=48%	15=22%

Hours per Week for Current Employment

	ORTHOPEDIC IMPAIRED n=1	HEALTH IMPAIRED n=1	MILD MR n=3	MODERATE MR n=4	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=22	TOTAL DISABLED n=35	TOTAL NONHC n=53
PART TIME/ LT 40 HRS.:	1=100%	1=100%	2=67%	4=100%		1=50%	8=36%	17=49%	27=51%
FULL TIME/ 40 HRS.+:			1=33%		2=100%	1=50%	14=64%	18=51%	24=45%
MISSING:									2=4%

Salary per Week for Current Employment

	ORTHOPEDIC IMPAIRED n=1	HEALTH IMPAIRED n=1	MILD MR n=1	MODERATE MR n=4	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=22	TOTAL DISABLED n=35	TOTAL NONHC n=53
LT $180.00 PER WEEK:	1=100%	1=100%	2=67%	4=100%			3=14%	11=31%	10=19%
$180+ PER WEEK:			1=33%		1=50%	1=50%	9=41%	12=34%	30=58%
MISSING:					1=50%	1=50%	10=45%	12=34%	12=23%

Medical Benefits

	ORTH IMPAIR	HEALTH IMPAIRED	MILD MR	MODERATE MR	SEVERE MR	MULTI HC	HEARING IMPAIRED	BEHAVIOR DISORDER	LEARNING DISABLED	TOTAL DISABLED	TOTAL NONHC
EMPLOYED	n=1	n=1	n=3	n=4	n=0	n=0	n=2	n=2	n=22	n=35	n=53
Employer Paid:				1=25%			2=100%	1=50%	8=36%	12=34%	20=38%
Parent's Coverage:				1=25%					2=9%	3=8%	17=32%
Self Covered:	1=100%									1=3%	1=2%
Spouse's Coverage:											1=2%
Coupons/Govt. Agency:		1=100%	2=67%	2=50%					1=5%	6=17%	
No Coverage:			1=33%					1=33%	8=36%	10=29%	9=17%
Unknown:									3=14%	3=8%	5=9%
UNEMPLOYED	n=3	n=1	n=3	n=4	n=1	n=1	n=2	n=5	n=12	n=32	n=15
Parent's Coverage:							2=100%	1=20%	2=17%	9=28%	5=33%
Self Coverage:											1=7%
Spouse's Coverage:										17=53%	1=7%
Former Employer:											1=7%
Coupons/Govt. Agency:	3=100%		3=100%	4=100%	1=100%	1=100%		2=40%	4=33%	5=16%	
No Coverage:		1=100%						2=40%	6=50%	1=3%	7=46%

Other Benefits Received with Current Employment

	ORTHOPEDIC IMPAIRED n=1	HEALTH IMPAIRED n=1	MILD MR n=3	MODERATE MR n=4	HEARING IMPAIRED n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=22	TOTAL DISABLED n=35	TOTAL NONHC n=53
VACATION									
YES:			1=33%	1=25%	2=100%		13=59%	17=49%	27=51%
NO:	1=100%	1=100%	2=67%	3=75%		1=50%	5=23%	13=37%	20=38%
UNKNOWN:						1=50%	4=18%	5=14%	6=11%
SICK LEAVE									
YES:				1=25%	2=100%		9=41%	12=34%	25=47%
NO:	1=100%	1=100%	3=100%	3=75%		1=50%	9=41%	18=51%	21=40%
UNKNOWN:						1=50%	4=18%	5=14%	7=13%
RETIRMENT									
YES:				1=25%	1=50%		9=41%	11=31%	17=32%
NO:	1=100%	1=100%	3=100%	3=75%	1=50%	1=50%	8=36%	18=51%	25=47%
UNKNOWN:						1=50%	5=23%	6=17%	11=21%

Currently Unengaged
(Not in School and Not Working)

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
YES:	2=50%	1=50%	3=50%	4=50%		1=100%		4=57%	10=29%	25=37%	3=4%
NO:	2=50%	1=50%	3=50%	4=50%	1=100%		4=100%	3=43%	24=71%	42=63%	65=96%

Other Income Received*

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
SSI:	3	1	3	4		1	1	2		15	
SSA:	1		2	1	1			1		6	
DVR:							2			2	
DDD:									1	1	
Welfare:			1					1	1	3	
Student Scholarship:									1	1	4
Student Loan:								1		1	10
Aid to Dependent Children:			1						1	2	
Unemployment Insurance:									1	1	3
Alimony/ Child Support:									1	1	
Military Reserves:											2
Other:				1						1	1

* Results are not exclusive; a graduate may receive more than one other outside income.

Graduate's Marital Status

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
Never Married	4=100%	2=100%	6=100%	8=100%	1=100%	1=100%	3=75%	7=100%	31=91%	63=94%	62=91%
Currently Married							1=25%		3=9%*	4=6%	6=9%

* 1 Learning Disabled graduate does not currently live with their spouse.

Does Graduate Have Children

Children	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
0:	4=100%	2=100%	1=17%	8=100%	1=100%	1=100%	4=100%	7=100%	22=65%	50=75%	61=90%
1:			4=67%*						9=26%*	13=19%	6=8%*
2:			1=17%						3=9%**	4=6%	1=2%**

* 2 Mild MR graduates, 5 Learning Disabled graduates, and 2 Nondisabled graduates do not currently live with their 1 child.
** 1 Learning Disabled graduate and 1 Nondisabled graduate do not currently live with 1 of their 2 children.

Graduate's Current Residence

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
Parent's Home:	1=25%	1=50%	3=50%	6=75%			1=25%	4=57%	11=32%	27=40%	21=31%
Other Relatives:			1=17%						2=6%	3=4%	3=4%
On own in House,Apt:	1=25%	1=50%	2=33%				2=50%	2=29%	17=50%	25=37%	40=59%
Dormitory, Barracks:							1=25%		1=3%	2=3%	4=6%
Employer Provided:									1=3%	1=2%	
Supervised Setting:	2=50%			2=25%	1=100%	1=100%		1=14%		7=10%	
Incarcerated:									1=3%	1=2%	
Traveling:									1=3%	1=2%	

Satisfaction with Overall Life Situation

	ORTHOPEDIC IMPAIRED n=4	HEALTH IMPAIRED n=2	MILD MR n=6	MODERATE MR n=8	SEVERE MR n=1	MULTI HC n=1	HEARING IMPAIRED n=4	BEHAVIOR DISORDER n=7	LEARNING DISABLED n=34	TOTAL DISABLED n=67	TOTAL NONHC n=68
Very Satisfied:	1=25%		1=17%	1=12%	1=100%	1=100%	3=75%	1=14%	6=17%	15=22%	37=54%
Somewhat Satisfied:	1=25%	2=100%	1=17%	6=75%			1=25%	5=71%	20=59%	36=54%	23=34%
Not Very Satisfied:	2=50%		3=50%					1=14%	4=12%	10=15%	5=7%
Not at All Satisfied:			1=17%	1=12%					4=12%	6=9%	3=4%

March, 1995
Univ. of Wa.
Decade Project

FAMILY INFORMANT INFORMATION
HIGHLINE SCHOOL DISTRICT
1990 GRADUATES - YEAR 5
5 YEARS AFTER GRADUATION

	Mild MR	Moderate MR	Multi HC	Hearing Impair	Behavior Disordered	Learning Disabled	Total Disabled	Total NonHC
POSSIBLE CONTACT:	5	2	5	1	4	24	41	43
TOTAL CONTACT:	**4=80%**	**2=100%**	**5=100%**	**1=100%**	**4=100%**	**24=100%**	**40=98%**	**41=95%**
CURRENTLY IN SCHOOL:	0	1=50%	2=40%	0	0	4=17%	7=17%	15=37%
EVER GRADUATE POST HIGH SCHOOL:	0	0	1=20%	1=100%	1=25%	4=17%	7=17%	20=49%
CURRENTLY EMPLOYED:	3=75%	0	1=20%	0	4=100%	18=75%	26=65%	34=83%
SALARY* $180+/WEEK:	3=100%	0	0	0	4=100%	10=56%	17=65%	20=59%
SALARY** $180+/WEEK:	3=75%	0	0	0	4=100%	10=42%	17=42%	20=49%
CURRENTLY UNENGAGED:	1=25%	1=50%	2=40%	1=100%	0	4=17%	9=22%	2=5%
RESIDENCE								
FAMILY:	2=50%	1=50%	0	1=100%	3=75%	11=46%	18=45%	15=37%
SUPERVISED:	0	1=50%	4=80%	0	0	1=4%	6=15%	0
INDEPENDENT:	2=50%	0	1=20%	0	1=25%	12=50%	16=40%	26=63%

* Salary percentages based on those graduates who are currently employed.

** Salary percentages based on entire graduate populations.

20% of all respondents did not answer salary question for those employed: 26% of the NonHC, 17% of the LD.

FAMILY INFORMANT INFORMATION
HIGHLINE SCHOOL DISTRICT
1990 GRADUATES - YEAR 5

5 YEARS AFTER GRADUATION

Gender

	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
MALE:	4=100%	1=50%	2=40%	1=100%	4=100%	20=83%	32=80%	26=63%
FEMALE:		1=50%	3=60%		0	4=17%	8=20%	15=37%

Currently in Post High School Education

	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
YES:		1=50%	2=40%			4=17%	7=17%	15=37%
NO:	4=100%	1=50%	3=60%	1=100%	4=100%	20=83%	33=83%	26=63%

Type of Post High School Education Currently Attended

	MODERATE MR n=1	MULTI HC n=2	LEARNING DISABLED n=4	TOTAL DISABLED n=7	TOTAL NONHC n=15
SOCIAL SKILLS PROGRAM:	1=100%	1=50%		2=29%	
JOB SKILLS PROGRAM:		1=50%		1=14%	
JOB CORPS PROGRAM:			1=25%	1=14%	
COMMUNITY COLLEGE:			2=50%	2=29%	3=20%
UNIVERSITY OR 4-YEAR SCHOOL:					11=73%
BUSINESS OR TRADE SCHOOL:			1=25%	1=14%	
OTHER:					1=7%

Ever Graduated From Post High School Institution

	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
YES:			1=20%	1=100%	1=25%	4=17%	7=17%	20=49%
NO:	5=100%	2=100%	4=80%		3=75%	20=83%	33=83%	21=51%

Degrees Received from Post High School Institution*

	MULTI HC n=1	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=4	TOTAL DISABLED n=7	TOTAL NONHC n=20
ASSOCIATE'S DEGREE:						11
BACHELOR'S DEGREE:						4
CERTIFICATE:		1	1	2	4	6
UNKNOWN/REFUSED:	1			2	3	

* A graduate may have received more than one degree.

Currently Employed

	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
YES:	3=75%		1=20%		4=100%	18=75%	26=65%	34=83%
NO:	1=25%	2=100%	4=80%	1=100%		6=25%	14=35%	7=17%

Hours per Week for Current Employment

	MILD IMR n=3	MULTI HC n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=18	TOTAL DISABLED n=26	TOTAL NONHC n=34
PART TIME/ LT 40 HRS.:	1=33%	1=100%	1=25%	5=28%	8=31%	12=35%
FULL TIME/ 40 HRS.+:	2=670%		3=75%	12=67%	17=65%	22=65%
MISSING:				1=5%	1=4%	

Salary per Week for Current Employment

	MILD IMR n=3	MULTI HC n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=18	TOTAL DISABLED n=26	TOTAL NONHC n=34
LT $180 PER WK:		1=100%		5=28%	6=23%	5=15%
$180+ PER WK:	3=100%		4=100%	10=56%	17=65%	20=59%
MISSING:				3=17%	3=12%	9=26%

Medical Benefits

	MILD MR	MODERATE MR	MULTI HC	HEARING IMPAIRED	BEHAVIOR DISORDER	LEARNING DISABLED	TOTAL DISABLED	TOTAL NONHC
EMPLOYED	n=3	n=0	n=1	n=0	n=4	n=18	n=26	n=34
Employer Paid:	1=33%				2=50%	8=44%	11=42%	20=59%
Parent's Coverage:						1=6%	1=4%	6=17%
Self Covered:	2=67%				1=25%	2=11%	5=19%	1=3%
Spouse's Coverage:								1=3%
Coupons/Govt. Agency:			1=100%				1=4%	
No Coverage:					1=25%	4=22%	5=19%	5=15%
Unknown:						3=17%	3=11%	1=3%
UNEMPLOYED	n=1	n=2	n=4	n=1	n=0	n=6	n=14	n=7
Parent's Coverage:		1=50%				1=17%	2=14%	5=71%
Self Covered:								1=14%
Spouse's Coverage:						1=17%	1=7%	
Coupons/Govt. Agency:		1=50%	4=100%	1=100%		2=33%	8=57%	
No Coverage:	1=100%					2=33%	3=21%	1=14%

Other Benefits Received with Current Employment

	MILD IMR n=3	MULTI HC n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=18	TOTAL DISABLED n=26	TOTAL NONHC n=34
VACATION						
YES:	2=67%	1=100%	1=25%	9=50%	13=50%	19=56%
NO:	1=33%		2=50%	7=39%	10=38%	14=41%
UNKNOWN:			1=25%	2=11%	3=12%	1=3%
SICK LEAVE						
YES:	2=67%	1=100%	1=25%	7=39%	11=42%	17=50%
NO:	1=33%		2=50%	8=44%	11=42%	13=38%
UNKNOWN:			1=25%	3=17%	4=15%	4=12%
RETIRMENT						
YES:	2=67%			6=33%	8=31%	14=41%
NO:	1=33%	1=100%	3=75%	10=56%	15=57%	14=41%
UNKNOWN:			1=25%	2=11%	3=12%	6=18%

Currently Unengaged
(Not employed and not in school)

	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
YES:	1=25%	1=50%	2=40%	1=100%		4=17%	9=22%	2=5%
NO:	3=75%	1=50%	3=60%		4=100%	20=83%	31=78%	39=95%

Other Income Received*

	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
SSI:		2	5				7	
SSA:						1	1	
Child Support:						1	1	
School Scholarship:						1	1	2
Student Loan:						1	1	2
Aid to Dependent Children:						1	1	
Veteran's Benefits:								1

* Results are not exclusive; a graduate may receive more than one other outside income.

Graduate's Marital Status

	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
Never Married:	4=100%	2=100%	5=100%	1=100%	4=100%	20=83%	36=90%	37=90%
Now Married:						4=17%	4=10%	4=10%

Does Graduate Have Children

Children:	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
0:	3=75%	2=100%	5=100%	1=100%	4=100%	18=75%	33=83%	38=93%
1:	1=25%					3=13%*	4=10%	3=7%
2:						2=8%	2=5%	
3:						1=4%	1=2%	

* 2 Learning Disabled graduates do not currently live with their children.

Graduate's Current Residence

	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
Parent's Home:	2=50%	1=50%		1=100%	3=75%	11=46%	18=45%	15=37%
House or Apartment:	2=50%		1=20%		1=25%	11=46%	15=38%	23=56%
Dormitory/ Barracks:						1=4%	1=2%	2=5%
Supervised Setting:		1=50%	2=40%			1=4%	4=10%	
Tenant Support:			2=40%				2=5%	
Traveling:								1=2%

Satisfaction with Overall Life Situation

	MILD MR n=4	MODERATE MR n=2	MULTI HC n=5	HEARING IMPAIRED n=1	BEHAVIOR DISORDER n=4	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=41
Very Satisfied:	1=25%		3=60%			10=42%	14=35%	29=71%
Somewhat Satisfied:	2=50%	2=100%		1=100%	2=50%	9=38%	16=40%	10=24%
Not Very Satisfied:			2=40%		2=50%	2=8%	6=15%	2=5%
Not at All Satisfied:	1=25%					3=12%	4=10%	

FAMILY INFORMANT INFORMATION
BELLEVUE SCHOOL DISTRICT
1990 GRADUATES - YEAR 5
5 YEARS AFTER GRADUATION

	Health Impaired	Mild MR	Moderate MR	Severe MR	Multi HC	Behavior Disordered	Learning Disabled	Total Disabled	Total NonHC
POSSIBLE CONTACT:	3	2	6	1	2	2	24	40	52
TOTAL CONTACT:	**3=100%**	**2=100%**	**6=100%**	**1=100%**	**2=100%**	**2=100%**	**24=100%**	**40=100%**	**52=100%**
CURRENTLY IN SCHOOL:	1=33%	0	2=33%	0	0	0	10=42%	13=32%	23=44%
EVER GRADUATE POST HIGH SCH.:	1=33%	0	2=33%	0	0	1=50%	6=25%	10=25%	27=52%
CURRENTLY EMPLOYED:	2=67%	0	4=67%	1=100%	1=50%	2=100%	17=71%	27=68%	40=77%
SALARY* $180+/WEEK:	1=50%	0	0	0	0	1=50%	10=59%	12=43%	22=55%
SALARY** $180+/WEEK:	1=33%	0	0	0	0	1=50%	10=42%	12=30%	13=42%
CURRENTLY UNENGAGED:	0	2=100%	1=17%	0	1=50%	0	2=8%	6=15%	2=4%
RESIDENCE									
FAMILY:	0	1=50%	3=50%	0	1=50%	2=100%	12=50%	19=48%	15=29%
SUPERVISED:	0	1=50%	3=50%	1=100%	1=50%	0	0	6=15%	0
INDEPENDENT:	3=100%		0	0	0	0	12=50%	15=37%	37=71%

* Salary percentages based on those graduates who are currently employed.
** Salary percentages based on entire graduate populations.
24% of all respondents did not answer salary question for those employed: 28% of the NonHC, 24% of the LD.

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FAMILY INFORMANT INFORMATION
BELLEVUE SCHOOL DISTRICT
1990 GRADUATES - YEAR 5

5 YEARS AFTER GRADUATION

Gender

	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
MALE:	2=67%	0	2=33%	0	2=100%	2=100%	21=88%	29=73%	29=56%
FEMALE:	1=33%	2=100%	4=67%	1=100%	0	0	3=12%	11=27%	23=44%

Currently in Post High School Education

	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
YES:	1=33%	0	2=33%	0	0	0	10=42%	13=32%	23=44%
NO:	2=67%	2=100%	4=67%	1=100%	2=100%	2=100%	14=58%	27=68%	29=56%

Type of Post High School Education Currently Attended

	HEALTH IMPAIRED n=1	MODERATE MR n=2	LEARNING DISABLED n=10	TOTAL DISABLED n=13	TOTAL NONHC n=23
SOCIAL SKILLS PROGRAM:		2=100%		2=15%	
COMMUNITY COLLEGE:	1=100%		6=60%	6=46%	3=13%
UNIVERSITY OR 4-YEAR SCHOOL:			3=30%	3=23%	19=83%
BUSINESS, VOC, OR TRADE SCHOOL:			1=10%	1=8%	1=4%

Ever Graduated From Post High School Institution

	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
YES:	1=33%	0	2=33%	0	0	1=50%	6=25%	10=25%	27=52%
NO:	2=67%	2=100%	4=67%	1=100%	2=100%	1=50%	18=75%	30=75%	25=48%

Degrees Received from Post High School Institution*

	HEALTH IMPAIRED n=1	MODERATE MR n=2	BEHAVIOR DISORDER n=1	LEARNING DISABLED n=6	TOTAL DISABLED n=10	TOTAL NONHC n=27
ASSOCIATE'S DEGREE:						4
BACHELOR'S DEGREE:	1			1	2	20
DIPLOMA:		1	1		2	
CERTIFICATE:		1		5	6	4
LICENSE:				1	1	1

* A graduate may have received more than one degree.

Currently Employed

	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
YES:	2=67%	0	4=67%	1=100%	1=50%	2=100%	17=71%	27=68%	40=77%
NO:	1=33%	2=100%	2=33%	0	1=50%		7=29%	13=32%	12=23%

Hours per Week for Current Employment

	HEALTH IMPAIRED n=2	MODERATE MR n=4	SEVERE MR n=1	MULTI HC n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=17	TOTAL DISABLED n=27	TOTAL NONHC n=40
PART TIME/ LT 40 HRS.:		4=100%	1=100%	1=100%	1=50%	6=35%	13=48%	13=32%
FULL TIME/ 40 HRS.+:	2=100%				1=50%	11=65%	14=52%	25=63%
MISSING:								2=5%

Salary per Week for Current Employment

	HEALTH IMPAIRED n=2	MODERATE MR n=4	SEVERE MR n=1	MULTI HC n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=17	TOTAL DISABLED n=27	TOTAL NONHC n=40
LT $180 PER WK:		4=100%	1=100%	1=100%	1=50%	3=18%	10=37%	7=17%
$180+ PER WK:	1=50%				1=50%	10=59%	12=44%	22=55%
MISSING:	1=50%					4=23%	5=19%	11=28%

Medical Benefits

	HEALTH IMPAIR	MILD MR	MOD MR	SEVERE MR	MULTI HC	BD	LD	TOTAL DISABLED	TOTAL NONHC
EMPLOYED	n=2	n=0	n=4	n=1	n=1	n=2	n=17	n=27	n=40
Employer Paid:						1=50%	9=53%	10=37%	16=40%
Parent's Coverage:	1=50%		1=25%				2=12%	4=15%	13=33%
Self Covered:									3=7%
Coupons/Govt. Agency:			3=75%	1=100%	1=100%	1=50%		6=22%	
No Coverage:	1=50%						4=23%	5=19%	4=10%
Unknown:							2=12%	2=7%	4=10%
UNEMPLOYED	n=1	n=2	n=2	n=0	n=1	n=0	n=7	n=13	n=12
Parent's Coverage:		1=50%					4=53%	5=38%	11=92%
Self Coverage:	1=100%							1=8%	1=8%
Coupons/Govt. Agency:		1=50%	2=100%		1=100%		1=14%	5=38%	
No Coverage:							2=29%	2=15%	

Other Benefits Received with Current Employment

	HEALTH IMPAIRED n=2	MODERATE MR n=4	SEVERE MR n=1	MULTI HC n=1	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=17	TOTAL DISABLED n=27	TOTAL NONHC n=40
VACATION								
YES:		1=25%			1=50%	6=35%	8=30%	18=45%
NO:	1=50%	3=75%	1=100%	1=100%	1=50%	5=29%	12=44%	18=45%
UNKNOWN:	1=50%					6=35%	7=26%	4=10%
SICK LEAVE								
YES:		1=25%			1=50%	5=29%	7=26%	17=43%
NO:	1=50%	2=50%	1=100%	1=100%	1=50%	8=47%	14=52%	18=45%
UNKNOWN:	1=50%	1=25%				4=24%	6=22%	5=12%
RETIRMENT								
YES:		1=25%			1=50%	4=23%	6=22%	11=28%
NO:	1=50%	3=75%	1=100%	1=100%	1=50%	11=65%	18=67%	22=55%
UNKNOWN:	1=50%					2=12%	3=11%	7=17%

Currently Unengaged
(Not employed and not in school)

	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
YES:		2=100%	1=17%		1=50%		2=8%	6=15%	2=4%
NO:	3=100%		5=83%	1=100%	1=50%	2=100%	22=92%	34=85%	50=96%

Other Income Received*

	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
SSI:		2	5		2	1		10	
SSA:				1	1	1		3	
School Scholarship:									2
Student Loan:							1	1	5
Military Reserves:							2	2	

* Results are not exclusive; a graduate may receive more than one other outside income.

Graduate's Marital Status

	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
Never Married:	3=100%	2=100%	6=100%	1=100%	2=100%	2=100%	24=100%	40=100%	50=96%
Now Married:									2=4%

Does Graduate Have Children

Children:	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
0:	3=100%	2=100%	6=100%	1=100%	2=100%	2=100%	21=88%	37=93%	52=100%
1:							3=12%*	3=7%	

* 1 Learning Disabled graduate does not currently live with their child.

Graduate's Current Residence

	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
Parent's Home:		1=50%	1=17%		1=50%	2=100%	12=50%	17=43%	15=29%
Foster Home:			2=33%					2=5%	
House or Apartment:	3=100%						12=50%	15=38%	35=67%
Supervised Setting:			3=50%	1=100%	1=50%			5=12%	
Tenant Support:		1=50%						1=2%	
Dormitory/ Barracks:									1=2%
Traveling									1=2%

Satisfaction with Overall Life Situation

	HEALTH IMPAIRED n=3	MILD MR n=2	MODERATE MR n=6	SEVERE MR n=1	MULTI HC n=2	BEHAVIOR DISORDER n=2	LEARNING DISABLED n=24	TOTAL DISABLED n=40	TOTAL NONHC n=52
Very Satisfied:		1=50%	2=33%	1=100%	1=50%	2=100%	12=50%	19=48%	39=75%
Somewhat Satisfied:	2=67%	1=50%	4=67%		1=50%		8=33%	16=40%	10=19%
Not Very Satisfied:	1=33%						2=8%	3=7%	2=4%
Not at All Satisfied:							2=8%	2=5%	1=2%

Appendix 5

Sample Case Study

FINAL CASE SUMMARY

CARLA

FIRST DECADE PROJECT
(Carmen Hadreas)

Data Base: This memo is based upon: Interviews with Carla (CRL1:11-06-92; CRL 2:11-18-93), Interview with her husband, Percy (PRC1: 1-5-93), several interviews/phone calls with the Public Health Nurse, Linda, an interview by phone with Carla's photography and homeroom teacher from high school, several calls with Carla, several phone conversations with Percy, an interview with Carla's mother via phone, contacts with CPS via phone, interviews with both sisters: Cari via phone, Connie included in CRL1 and CRL 2, School transcripts (only school record available), contacts with school district re. her children, contacts with social service agencies, & visits to the home.

Chronology

Carla grew up living with her father and his wife, Luann, through most of her early years, because her mother was a "bad mother" according to her children [Connie, CRL 1, Carla, CRL 2]. Her father had a kidney disorder, and was sickly. He collected SSI, and Luann worked at a 711-type store and also collected SSI. She has two older sisters who also lived with their father (both attended special education but did not graduate), and two half-brothers. In 1982, the summer between Carla's ninth and tenth grade years, her father and step mother moved out of town and she chose to stay in her neighborhood. Perhaps more accurately, it appears that she was sort of left behind. She lived in their abandoned home for about a month, and then went to live with neighbors so she could finish school. These neighbors kicked her out in a week because she was too much trouble and they did not speak English [CRL2] and she went to live with her maternal grandmother (See Family Support and Mentor). Her mother would visit occasionally, but basically remained out of the picture. Carla stayed with her Grandmother through her graduation from a special education HS in 1985. After graduation she moved in with her father, who had moved back to town. She continued to live with her father and his wife, Luann, until moving in with Percy in 1986.

Carla attended a special education high school, and her secondary years were exciting for her. She enjoyed school, and really wanted to graduate. She was a cheerleader, and played basketball on the school team off and on. The classes listed on her transcripts were general academics and a variety of other classes, including vocational training in food service preparation. She did poorly in this area, however [CRL 2, Teacher], and did not wish to pursue foods as a career. She reports that the food handler's test was too difficult. Other classes included Photography, Crafts, and Adult Living. (Consequently, the majority of her classes were geared toward vocational training and independent living, including special education support in academic subjects.) Her grades were generally B's, with her grades declining in her senior year (i.e. F in PE, D in Science). Carla had several good friends in high school [Teacher, CRL1]. Two of these friends she kept in contact with for a few years post graduation; they have since lost touch.

The label reported for Carla's special education requirements listed for this project is mildly mentally retarded. The only school record available is a transcript for 1977-1985. Thus, labeling criteria, testing, etc. are not available for confirmation. Carla does have a great deal of difficulty reading a simple book to her son [observation, CRL2] and cannot balance her (joint) checking account [CRL 2]. Just this past year her husband taught her how to write checks (which he reports was a difficult task: [PRC 1]).

Carla briefly held two jobs after high school, at a Jack-in-the-Box and a thrift store, but reports losing both because she was unable to understand the register and price codes (see Academics and Jobs). Carla's last job was at the thrift store. Because pricing was too difficult to figure out, she just quit going to work. Perhaps she was able to leave this job with little consequences, as she was dating Percy at the time, and could be somewhat assured of his financial support (she moved in with him shortly after leaving the thrift store job). She has not worked outside of the home since 1986.

During high school Carla dated a physically abusive boy [CRL2] followed by a steady boyfriend, Kelley (See Mentors). While she was seeing Kelley, she became involved with Percy. In spite of a physically abusive incident involving Percy outside her home with her family present (See Pattern of Victimization), she began an exclusive relationship with Percy.

In late 1986 Carla became pregnant with Percy's baby. This pregnancy was a tubal pregnancy, and she got very sick before losing the baby. Percy reports, and this is confirmed by Carla, that he helped her to the hospital just in the nick of time; she almost died. Carla moved in with Percy and his mother after this incident in late 1986. (This home was across the street from Carla's father's house.)

Carla and Percy stayed with his mother until she moved out and moved to another town in 1987 or so. They still live in his mother's home rent free, although they pay the property taxes of approximately $2,000.00/year.

In 1987 Carla became pregnant again, and her son, John, was born in 1988. (She was still unmarried at this time.) Her step-mother, Luann died the same year, and Carla was very sad about this loss. Her father died the following year, and her Grandmother the year after that.

Carla and Percy were referred to CPS by Children's hospital in 1989 because John ate Carla's Phenobarbital, which she was taking for unclear reasons (see Health). CPS referred the case to the public health department, who visited and taught her to put the medication out of reach. Three years later Pat (her next son) drank ammonia, and the same referral process was followed. The nurse again helped her to put the cleaning supplies out of reach of the children. Carla and Percy were married in 1989.

In 1990 Carla gave birth to their second son, Pat. Percy continued to work loading Barges. The family received health benefits through this job. Percy was pushing Carla around before this, but in 1990 he pushed her or hit her so severely that it caused her to visit the emergency room. Carla also reports that Percy let his brother push her around. (See Marriage; Pattern of Victimization.) In 1991 Carla visited the ER again, this time because of a severe seizure caused from a blow to the head by Percy.

Carla currently lives with her husband and their two sons, John, who is five, and Pat, who is almost three. Pat currently receives special education services at home after an unsuccessful special education preschool experience (he cried all of the time), and John will enter kindergarten in the fall (he was recently tested for sped, but did not qualify).

Carla's husband lost his job loading barges in Dec. of 1992, and the family now lives on his free-lance work and unemployment insurance (although that is probably now up). The family does not currently have health insurance and medical coupons for the children have been cut off because the time limits for unemployment insurance have lapsed. Carla broke her foot earlier this year. It is not healing correctly, but the threat of medical bills (and her husband's not "letting" her to get treatment because of the monetary issues) keeps her from proper care.

Family

Carla was the only one of three siblings and two step-brothers to graduate from high school. Neither her mother nor her father completed high school. It is unclear whether her step-mother finished school, but Carla does not think so. perhaps the reason Carla completed high school is related to the fact that she attended a secondary special education center, although it appears that this is the same high school that her sisters attended before dropping out (both followed dropping out with leaving the family home). An examination of her general family support system does not shed light on why Carla completed high school while all the others in her family did not. (Mentoring or rescuing, however, may.)

Carla reports fondness for her Dad and step-mother [CRL 1], and appreciates "all that they did" for her. She cites them as very influential in her early years. When asked about their support for schooling, she talks about their support in terms of telling her to "keep up good work." This is confirmed by her sister, Connie, who basically said the same thing. Connie did not complete school because she ran away and moved out. Thus, the information about family support around school competition is conflicting. If the family were indeed supportive of school the way that Carla alludes to, perhaps other children in the family wound have continued schooling instead of dropping out or running away. (No children went with the father and step mother during the move to Tacoma in 1982, thus this move was not influential on any of them.)

To add weight to this conflict is the fact that Percy reports that the family "didn't do a damn thing for her." He says that the family did not encourage her to graduate, with the exception of her grandmother. Both Percy and Carla credit this grandmother for the majority of the support Carla received through high school. perhaps Carla doesn't want to speak ill of the dead (her father and step-mother have died), and reads more into their participation in her schooling. Certainly they were not attentive to her health. In the interview with Percy, he refers to the family's lack of concern for Carla's health and schooling. As an example, when comparing the support that Carla got from her father and step-mother as compared to that given to her sisters, Connie and Cari:

> *Well, her family gave her no support at all. They thought she was just a total basket case. Um, her epileptics history was all in her head. Luann used to just rant and rave. She [Luann] would have never done a damn thing for her. ever. None of those times. I carried her outa that house.*
>
> *.... Oh, man, she [Luann] would do anything for Connie. Anything. She, um raised them kids up until the day she died. You know, Connie never once had to take them kids anywhere. Connie was just like a teenager that never even had kids as long as Luann was around. And Carla was just put out big time....[put out of the home] [Percy 1]*

In any case, it is clear that Carla's grandmother supported her throughout her schooling. This is the same grandmother that bought Carla a special dress for graduation, and supported Carla's relationship with her high school boyfriend, Kelley. Kelley helped her with her school work and would drive her to school and later to work. He was older than Carla, and was well liked by her grandmother. He would eat over at their house. Her grandmother encouraged her to stay in school, and would help her when she needed help.

Carla's mother was not really in the picture much while she was in school. It is worth noting that Carla still lives in the same neighborhood that she lived in with her father (in the house across the street), and her grandmother (within a few blocks).

Carla's current support is interesting. It seems that she maintains a support system with her sisters; they stick together. Yet upon closer examination, it becomes apparent that it is Carla that supports the other two women. Carla is clearly thought of in this family as the one who is successful and strong. For example, when her sister, Connie, was in a debilitating car accident two years ago, Carla was the one who helped her and her children cope with the hospitalization. Also, when Cari's baby died, Carla helped. [CRL1, both Carla and Connie] When interviewing both Connie and Carla (their houses are directly across from each other), the children ran from home to home. But observation shows that when both set of children have been hungry, they ask Carla, not Connie for food (they usually end up getting it themselves-once a gallon of rocky-road ice cream at 9 a.m.). Yet when Carla discussed abuse episodes or other times when she needed help, she never mentioned her sisters as helpmates. This entire shaky personal support system for Carla is also an example of the theme "*low expectations* "that is discussed later in this memo.

Percy confirms this lack of system help when there are emergencies, Carla's family falls short. In spite of the fact that they visit his family in Oregon (his mother and brothers) frequently and that Carla's sisters live so nearby, Percy does not see any of these people as support. Although he is not speaking to specific times, while talking about their life together, Percy says:

> *And I'm scared to slow down, cuz I got no parents, no one to fall against. She's got no parents, no one to fall against. So we're stuck in this life. And we got kids and stuff. And life don't stop for us. So alls I try to do is work and work and work and try to make this thing survive. [PRC]*

Percy is unhappy with Carla (See Marriage), yet continues to support the family financially as long as he is employed, and scrambles for jobs to keep the family going.

It is important to note someplace here that Carla's *expectations* of support are minimal. Not once does she express dissatisfaction with her family or the amount of support that she receives from them. Although Percy clearly feels that her father and step-mother were not supportive, Carla talks about them as if they really helped her. This attitude is in direct contrast with the fact that her father and step-mother moved and left her alone (she was rescued by her grandmother after Carla asked her for help). This lack of support may have been due to the father's poor health (he had a kidney problem), but it stands to reason that it was an atmosphere that was not supportive of school, as Carla is the only sibling of five to graduate from high school.

This theme of low expectations is continued in her marriage. It is also clear that she does not expect much more from her sisters than she is getting from her husband, which is minimal at best. In fact, she reports in the second interview that Percy has been trying to sleep with Connie (CRL2 378-384, CRL 2 467-475), and she does not feel that she can trust him (CRL 2 657). Most folk would expect more from their sister and husband.

Mentor

Clearly, the most influential mentor for Carla throughout school was her maternal grandmother. She came to the rescue when Carla had no place to live, (after living alone and then getting kicked out of the neighbor's home after her father had moved). However, it is worth noting that Carla called her grandmother first, asking her for help. This mentorship, then, began with a gesture initiated *by Carla.* The grandmother helped her with homework and bought her a special dress for graduation.

When explaining how it came that she moved from her father's home to the neighbors and finally to her grandmothers, in CRL 2, Carla has this to say about her grandmother.

Because when they moved to [town south], I wanted to finish high school. So I like stayed in that abandoned house that they lived in for like, I don't know, about almost a month. And I was going to school almost every day. And I was like living with the neighbors, and they finally locked me out; took all my stuff. So I called my Grandma. My grandma took me and bought me a bunch of new clothes and took me in. I lived with her for three years. [CRL2 855-866.]

Her grandmother persevered with Carla through some difficult times. Carla had this to say about her later in the same interview.

She treated me right. We got into arguments, you know. It was like, "Hey, Grandma, You're not my mom. You can't tell me that." But those were times when I'd go out and I wouldn't come back, you know. She told me to do something, I say, "Well, hey, you're not my mom. You can't tell me what to do." She told me to get out. A couple hours later she called me at a friend's house and told me to come back home. She bought my graduation dress. [CRL2, 897-900.]

Carla's boyfriend, Kelley, also assisted her. They dated for 3-4 years, making the onset of this relationship around 1982, which is interesting in that her father left around that time (CRL2 256-258), and he was older than her. He would drive her to school and to work. As an aside- Carla does not mention that Kelley was in special education, and she met him in the neighborhood. In fact, it appears that he graduated a few years before Carla. This situation changed when Carla met and began dating Percy, another boy from the neighborhood.

After high school Percy lent support to Carla. He financially supported her before the birth of their sons and after she lost two jobs. He continued to support the family until he was recently laid off. He reports wanting Carla to have friends outside of the home. (This is supported by his happiness in seeing me during our coffee time- see next section- but is disputed by Carla and Connie at other times in the interviews.) Percy taught Carla how to write checks; a process he says was not easy. He got her to the doctor when she had a severe reaction to a tubal pregnancy, and again when she "damn near died" because of a reaction/over dose of Phenobarbital. Connie also reports that Percy is good for Carla (although their is an odd dynamic here- Carla reports that Percy comes on to Connie and she to him, and he also mentioned this).

Although Carla's grandmother is a mentor for her, her initial entrance into Carla's life in this role is when Carla called her after being locked out by the neighbor. Thus, the grandmother was not the person to choose the mentor role. There is a question here of *rescuing*, which may imply a different kind of support than traditional mentoring. Percy also came to her rescue when she was sick due to her tubal pregnancy and again when she had a seizure that landed her in the ER. This interviewer also rescued her in a way, by initiating calls at Carla's request. Can Carla then make the initial request of people, and others come to her aid?

In brief summation, it appears that Carla's grandmother was a valuable support person for Carla through school. She also had an older boyfriend, Kelley, that helped her through school. Percy has been supportive of her post high school. There is a question of whether these situations constitute mentor-like support or rescuing. Carla is now the social support system for her family. She has little support outside of her home.

Social Life/Romances/Friends/Recreation

Carla had friends in high school that she bummed around with. Carla longer keeps up with her high school friends. She kept up with two of these friends for awhile, but no longer visits them. She reports having no friends outside of her family or Percy's friends' wives and girlfriends.

Carla reported in the second interview and on the phone that Percy will not allow her to leave the house without Permission. This control is confirmed by the first contact that the interviewer had with Carla, when she initially refused to be part of the study. Upon further probing by the interviewer, Carla granted Permission to call back the next day (10-29-92) and talk to her husband. It was after this conversation that Percy gave Carla Permission to take part in the study, as long as he would be home at the time of the first interview. Connie also confirmed Percy's control of Carla. [CRL1]

Percy does **not** confirm this amount of control. Instead, he says that he wants her to get out of the house more and have more friends. He attributes her lack of friendships and social life to her behavior (he says it is mental health) and her inability to maintain any relationships without being a 'bitch" [PRC1].

Carla had boyfriends in high school. One of these boys would hit her. She had a special boyfriend for quite awhile; a man she still thinks about. This man, Kelley, was very well liked by her grandmother. He was good to her. He was also a support of sorts. She met Percy while she was dating Kelley. It sounds like Kelley was well liked by her grandmother, helped her with school, and would drive her to work. He was a dependable guy; a mechanic. Percy was more exciting, and would make more money. He "got rid of" Kelley. She regrets her choice at times.

Carla still lives in the same neighborhood that she lived in with her father (in the house across the street), and her grandmother (within a few blocks). Her excellent directions for the interviewer (phone, 11-1-92) from the [large grocery store about 5 blocks from her home] and her ability to name the area in which she lives shows she knows this neighborhood well.

One of the social skills Carla seems to have difficulty with specifically is *patience*. She is impatient with the nurse or myself if we are not available when she calls or she is not called back immediately. Percy alludes to this in reference to employment. This could go hand-in-hand with not being able to stick with things, about which he speaks at great length and with little admiration. In CRL2 (223-227), she mentions waiting for Kelley to finish working on cars in order to do something with her as a major cause of their break-up. I am wondering how much this trait has hurt her socially.

In addition, Carla has repeatedly shown a *pattern of victimization*. First of all, it appears that her mother was an abusive woman, both physically, and in placing Carla and her sisters in situations where they could be sexually victimized. It is unclear whether there was physical abuse in the father's home (he was very ill all of Carla's life), yet certainly the leaving to another city could be viewed as neglectful. She was beaten by a boyfriend in high school. Percy hit her before they moved in together, beating her up in front of her family's home. Here is some of Carla's account of that incident.

> *Percy beat me up out in the yard. I didn't even hardly know this guy. And the people--Percy's brother was standing next door. He goes, "Kill the bitch, Percy. Kill her." You know, he was kicking me all over the yard, dragging me, and my parents were standing there. I finally got up and crawled in the back yard to get away from him. He says, "Go in the house and clean yourself up now." You know, like he was my boss or something. [CRL2 235-255]*

A pattern of victimization also correlates with Carla's accounts of needing permission to leave the house and Percy's general control over her (See Social, etc.). This is complicated by Carla's strict ideas about the role definitions of "wife" (See Marriage).

The police were involved at some point, and Percy was assigned to anger management [CRL285-291]. She has been hit by her husband several times that she talked about in the interviews, including twice that landed her in the ER with seizures. She has also been thrown around by Percy's brothers. (*When I was pregnant with Pat he picked me up and threw me across this living room. I'm serious. He did.-* [*CRL2178-180*]) and allows that same brother to verbally abuse the children [CRL2 150-166]. Percy also reports that her family was awful to her. There is also a reference in the interview with Connie about the birth mother's boyfriends trying to molest her. It crops up again the CRL2. So, this pattern might be a familial one as well.

Two months ago Carla called me and asked me over to have a cup of coffee. I went for about 20 minutes. She had coffee ready and had remembered that I took cream. It was a pleasant visit. Her children played around us. She had picked up her home. Although she reports the same issues listed above (e.g. with Percy; her foot) remained firm in her wish to stay home with her children. Carla was an enjoyable coffee companion. My point here is that Carla has social skills which make her an enjoyable companion. She learns and remembers things, like cream, from one time to the next. However generalization seems difficult foe her, like knowing that Phenobarb and ammonia are both poisons and should be put up. It appears that the fact that she has social skills and retains information but needs assistance with things that require generalization, especially safety factors. Minimal case management would suit her well.

Marriage

(See also other sections of this memo.)

Carla has been married to Percy since 1989. They were married following prior experiences with a tubal pregnancy in 1986 and the birth of their first son, John, in 1987. Following their marriage, their second son, Pat, was born in 1989.

When asked how she would rate her satisfaction about her marriage in a phone call, Carla says "it's OK." When asked " to rate her marriage on a scale, she indicated "about the middle, I guess."

Both Percy and Carla complained about the other in each interview. Carla's main complaints are that Percy is mean to her (i.e. calls her stupid and retarded), she is trapped and Percy won't let her go anywhere, they don't go anywhere or do things together as a couple, and he hits her. In spite of her rating of the marriage, she reports wanting to leave at times.

Percy's main complaints are that Carla doesn't do enough around the house (i.e. cooking), Carla can't stick with anything (i.e. a job), her temper, and that Carla is fat. He reports not liking her.

My observations are of two persons struggling to make ends meet that live a hard life, and are hard with and on each other. They have always had financial difficulties that have been made worse by Percy being laid off in 12/92. Currently neither is employed (Percy picks up freelance work off the record) and the family does not have health insurance.

Health

There are three issues here. Two physical issues are Carla's personal health, and the family history of poor health of her father coupled with a current theme of poor health in her sisters (Cari: drugs and poor general health, Connie: sick all the time and the car accident). Finally, the financial issues of the cost of health care and battles with insurance/medical coupons.

Carla's father and step-mother received SSI throughout Carla's growing-up. Her father received dialyses for a kidney ailment as long as Carla remembers. He died of this disease a few years ago. This chronic illness may have had a profound impact on his (and the entire family system's) ability to support Carla in her school endeavors.

Carla received medication for seizures for many years. The reasons for these seizures and the specific nature of her diagnosis remains undetermined. At one point in the interview with Percy, he referred to epilepsy, although this remains unconfirmed. Carla took medication in high school, but the only record remaining are transcripts, thus no school records exist on this matter. Carla had a seizure incident prior to her marriage to Percy during which she needed medication and did not have it with her. According to Percy and Carla both, she was rushed to the ER and given too much medication to compensate, almost dying from over medication. Percy "saved" her. This incident, in combination with her son, John, taking Phenobarbital and having to visit the ER himself (CPS referred the incident to the public health nurse: See Chronology) led Carla to quit taking any medication. According to Carla, the medication made her weird, and she does fine without it as long as she is not beaten (re: other portions of this memo). Percy reports that Carla was given the wrong medication, and that the doctors told him she didn't need it.

Both Percy and the public health nurse [phone 11/16/93] made reference to Carla's seizures and her driving. Although Carla reports driving her youngest son to preschool (he now receives special services at home because preschool didn't work out), she has never had a license to drive. The public health nurse has been unable to confirm whether Carla actually should be taking medication. We have been unable to determine exactly what the medication (Dilation and Phenobarb, according to Carla and Percy) was prescribed for. Percy reports her family thought her seizures were "in her head," yet Carla has such severe seizures when not medicated [PRC1], and when struck by Percy in at least two confirmed incidences. In summary, in regards to the seizures, it is unclear how or why they occur, or if medication is currently indicated.

Percy continues to be concerned about Carla's health. He confuses health issues in this dialogue with appearance, but the general concern is there. Summing up his feelings about Carla's health and the effect her poor health has had on their life together:

I know one is that I know that the reason the she's gotten so lazy is because of her health. And if I thought I could get some kinda medical help that wouldn't destroy us financially, and get her health back together, that would probably eliminate about 90% of our, of our, you know. We would probably enjoy ourselves a lot better. You know. If, one, she looked more healthier. I mean she can be a really, uh, a attractive person. When her health is up. She let herself go. Her gut bag is so huge it doesn't look a day different than when she had Pat. Not one ounce different. And, you know, it's just, it's pathetic. It is. The kid's almost three. It's time to do something about it. She hasn't done nothing about it. Period. So, if I thought I could get some kinda help somehow to get that surgery done, it'd prob'ly make our lives a lot less stressful. We'd prob'ly enjoy ourselves a lot more. So that'd be about the only thing. That and some mental counseling or something. Maybe for both of us or something. (long pause)[PRC1]

Carla's health continues to be poor. She has some kind of stomach problem that she has had throughout the interviews. Carla called this a "herniated stomach," which is what the public health nurse called her condition, also. She broke her foot outside in the yard in

December of 1992. She called the nurse, and when unable to reach her, called the interviewer for this project. When this call was returned the next day, it had been over two days since the injury had occurred. She had not seen a doctor, because Percy "would not let" her go, due to the resulting bills. The interviewer advised calling the nurse and going to (hospital that serves persons with low funds), and called the nurse. Carla did go to the hospital with her sister, Connie, and the nurse called back that day. The nurse continues to check up, and reports (as of 5/93) that the foot is not healing properly due to poor care. Carla continues to site money as the issue, and this was confirmed by the interviewer with Percy over the phone.

Finally, the issue of money and health care has been unresolved as of 5/93. The two children, John and Pat, have received medical coupons from 1/93 through 5/93 because Percy was laid off in 12/92. Carla reports via phone that these coupons will expire 6/93. Percy and Carla do not receive coupons themselves, nor can they afford to carry health insurance. (They had received health benefits through Percy's barge loading job.)

Finance

The largest problem in this area is the lack of money that Carla and her family have at this point. Since her husband was laid off 6 months ago, their financial difficulties have increased. Both Carla and Percy report Carla's inability to budget and her lack of understanding about the checking account they hold jointly. Percy reports spending a year to "just get her to be able to write a check." Carla reports that he is unhappy with her because she cannot perform the task of household budgeting, which they both feel is a wife's job. Carla further reports that she cannot add and subtract, and this would confirm her difficulty with figures.

Legal

There two legal issues in Carla's interviews. The first is the mention of what sounds like a restraining order in CRL2 against Percy due to a physical altercation leading to an ER visit. According to Percy, he was sent to anger management classes following police intervention after a beating.

The second legal issue is the issue of the two CPS referrals. Although no police or legal intervention occurred, both incidence were precipitated by referrals to CPS by doctors in the emergency room. Both times CPS sent the public health nurse out to check out the home, and no further action was taken, resulting in a closed CPS file (and inactive and erased, thus unavailable for data for this study). Since the public health nurse continues to have contact (minimal(with the family, she functions somewhat as a watch dog for any further CPS related activity.

OTHER INFORMATION AND POSSIBLE THEMES:

Social Competence

CASE MEMO: CARLA
6-29-93

FIRST DECADE PROJECT
(Carmen Hadreas)

Throughout the interviews there seems to weave a thread of information about Carla's social skills or personal attributes that contribute or detract from her well-being. For example, her lack of patience, Her apparent inability to stick to tasks during difficulty (i.e. employment), her inability to handle two things at once, and a general pattern of victimization.

As an example, here is what Percy has to say about her while discussing her inability to sustain employment and her ability to follow-up on special services for their youngest son (Percy 1)

> *"it just boils down to that uh, she's very low on self-esteem and she can't push herself at all. It's amazing. It's amazed me that she's got the kids to school, uh, this is like the fifth day that she's done it. And it just surprises me. I'm just amazed. I don't expect it to happen. It wouldn't surprise me if it did. If tomorrow was the last day though. You know......*
>
> *....... She's just got a low, really super low will power. She'll just decide that she can't go outside that day or something. You know I got a lota trouble just getting her to do anything. (long pause) She'll stay inside this house and watch the kids and stuff. unless I come home and take 'em somewhere and something like that, she, she doesn't, she don't go anywhere. She won't even go out of the house. I don't know if she feels like she can't deal with society or, if she's just too incompetent, or if she's scared that she's going to get sick or something, or.. I mean I could understand that. I wouldn't want to go fucking and tell somebody that I want to get a job or something and not being able to physically do it you know. Because she doesn't know if she'd gonna get a bad headache or something and that's what causes it. As soon as the headache comes on she's gonna have a seizure. But there's times when it goes months at a time without it happening.[PRC1]*

Although there is confusion here about whether Carla's self-esteem or lack of will power, or her health is the cause of her lack of stick-to-it-ness, there is something here.

Later in the same interview:

She's just...She's incompetent to go do things by herself. She cannot go by herself to a job every day because she couldn't take her sister with. (long pause) [PRC1]

Perhaps this is a theme that will develop across a disability category; inability to persist, inability to cope with stressors in tandem, or an overwhelmed feeling/depression?

In addition to the more identifiable attributes listed above, and as a possible theme, ***lack of social maturity*** would seem to cover some of this area. There are references to Carla's temper in the interview with Percy. For example:

About getting her up to do something. She throws such a fit over it. Such a tantrum most the time that I just don't care to deal with it. Throwing a fit like that it's just not worth dealing with. You know. I'll just take the kids up here and we'll get us a hamburger so we don't have to worry about it. [PRC 1]

Carla refers to her temper and/or frustration response in high school:

Sometimes I did get in trouble sometimes. And uh, well, in the 6th grade I got really mad, really frustrated and I threw a desk at the teacher. (laughs) Well, she tried telling me one thing, and I thought it was another, and it was a losing battle. And I just got really *frustrated and I went to the principal and he took me out of class and so... I had to go home. [CRL 1]*

Carla's teacher made reference to this occasional lapse in judgment, but seemed to think it was no big deal; giving the impression to the interviewer that it was typical behavior. This could certainly be true, but the fact that Carla attended a special education high school provides the comparison data with which the teacher was working. Thus, this lack of social maturity or impulse control may have affected her chances for keeping a job, this project's definition of "success."

Academics, Handicapping Condition, and related Programmatic Themes

Carla attended a high school where the student body was made up entirely of special education students. This special population could account for her inclusion in social events and clubs such as cheer leading and basketball. Carla's inability to read a simple book to her son, John, her poor understanding of the fiscal matters of the household (she cannot grasp the checking account; it took her awhile to learn how to even write a check), and her inability to read the forms well all confirm her deficits. Carla reports an awareness of her poor academic skills and credits these deficits with some of her roadblocks.

Carla sites poor skills for her unsuccessful employment attempts. Although she currently reports wanting to stay home with her children in spite of pressure form her husband to find a job [phone call 12/92; CRL2] (he was laid off in 12/92), Carla also reports a anxiety over being able to find or be successful in a job at all. She feels that she is unable to read or "do math" well, and that this lack of skills prevents her from being able to do a job well, or to keep a job. Both jobs that she has held were post school, prior to the birth of her children. She lost both jobs, and it is unclear exactly how that happened (she reports being fired, Percy reports that she just quit going to her thrift store job). Of her experience at Jack-in-the-Box, Carla says:

Well, I worked at Jack in the Box and it 's just, it got too stressful, and........workin' the cash register got really hard. And I'd always mess up. I'd.. always get in trouble. And then I worked at Shop 'N Save. And that job didn't last too long, cuz, I hadta do lot of adding and a lota pricing and stuff like that. And I couldn't do it cuz.... I just can't do it (said with emphasis). I just, the adding and stuff was real hard. I can't really add, or read hardly. But I know things, and um.... I can't really read big words. ....Sometimes it's hard to sit down with a book. Kinda hard. But the adding and subtracting, [CRL 1]

Her husband further confirms this theme of poor skills. When talking about her inability to handle money Percy links what he calls her poor self-esteem with her inability to figure things out.

Her confident level in herself is real low, her self-esteem, her ability to do things, to learn things. It took me, shit, four years just to get her to, just to get her to figure out how to fill out a check. Before we could, you know, how was she could help me pay the bills around here, you know. And, uh, I got her to basically be able to do that. And she can read, and she's got penmanship. She can write in cursive and stuff. And it's really kinda bizarre. I can't understand why she is limited in any way. And, um...But uh, she just doesn't take *things in. When something is taught to her and explained to her and something she just doesn't absorb it: [PRC1]*

.... And she hasn't learned anything more than you learned by the fourth grade. You know how to write cursive in the fourth grade, you know. About as good as she does. [PRC 1]

Poor academic skills and a general slowness have hurt her in terms of employment, as well as in her fiscal management, and in turn in her relationship with her husband.

Accessing Available Services

It seems that Carla would qualify for a variety of services. For example, SSI, student services at a community college, special education services and/or Head start for her children, VR, or services from DDD. However, prior to my entrance into her life, she was unaware of most of these, with the exception of SSI, which her father, step-mother, and sister, Cari, had been receiving. I contacted the school district that they live in and helped coordinate testing for her children; Pat qualified for special education, and John will receive full-day kindergarten in the fall. I also helped Carla call DDD, and she has completed the testing for admission into their program. Also, the public health nurse will be visiting her home on a regular basis to assist her with the day-to-day health needs of her children and herself. These were simple and quick calls, and have taken a minimum of effort to do. There is something here about two things- 1.) Why is she unaware of the existence of these services? Is there an absence of transition planning or coordination of post-school services unique to this case, or is this typical? and 2.) Is there a place where case management is available for this family as a unit? We have more than one special needs person in this four person family. Carla's ability to generalize Phenobarb and ammonia as both poisons, her lack of understanding about household finances (she just learned how to write a check, and cannot figure $ out), she wants the best for her children, but doesn't know how to get day or testing for free schooling, and Percy's report that she is unable to get it together to grocery shop and cook from a recipe all may be things that case management can assist her with. The public health nurse agrees with that, and her visit are helping Carla keep her children safe and healthy. Carla does call the nurse when she needs help (although if the nurse is unavailable right then or doesn't call her back quickly, Carla is impatient), so it appears that she is capable of accessing services when she needs them *and knows about them*. Is the lack of services part of a poor transition plan, or is it related to Percy's explanation of Carla just being lazy?

Parenting (explored further in later memos)

Carla has a well developed sense of what she feels her roles are. For example, when talking about what she does all day, she talked at length about what a "wife does."

> *I take care of my husband, and.............I clean house, make dinner for him, and wash his clothes, have his clothes ready for him, and....just basic things, nothing different.... that a wife doesn't do. (laugh) all the wife things. [CRL 1]*

This thought process of having firm roles and ideas about the way things "should be done" is also evident in her assessment of her own parenting. In interviews 1 and 2, Carla talked to the issue of her bond with her sons. In observation, she is loving and kind toward both of the boys. The public health nurse also feels that Carla is a loving and kind parent. Yet Carla feels that she is different toward each child, and she explains that difference in this piece of dialogue.

"...like I was telling the nurse, there's not really a bond between me and John. Because I got And I spend a lot of time with Pat and John is, you know, daddy's boy (hmmhmm). That's what he really looks forward to. His Dad....they go places and stuff. Me and Pat just hmmm, it's kinda hard cuz.........I spend more time with Pat and not very much time with my older son. We're not really that close. But, you know, Percy and John are really close. I don't feel so bad then. But, I think they do."[CRL 1]

Finally, Carla reports poor control over her children; they listen to Percy. Even with Pat, with whom she reports a close bond, she reports not knowing what to do when he gets tough to handle (Pat is 2 at the time of CRL2).

He beats his head on the floor--...or the cement if he is outside playing, and it kinda makes me mad because if he hasn't got no control--so when he gets mad, it's over. He bangs his head on the table or anything hard. [CRL2, 36-46]

Appendix 6

An Analysis of Respondent Agreement in Follow-up Studies of Graduates of Special and Regular Education

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Respondent Agreement in Follow-Up Studies of Graduates of Special and Regular Education Programs

PHYLLIS LEVINE
EUGENE EDGAR
University of Washington

ABSTRACT: Two studies, involving postgraduates in both regular and special education, analyzed the agreement between parents' and postgraduates' responses on postschool status. High agreement percentages and strong Cohen Kappas were obtained for the variables of attending postsecondary school, employment status, type of residence, marital status, and number of children. Low agreement rates and weak Kappas were obtained for the variables of salary level, hours worked, and medical benefits received. Results indicate caution in the use of data obtained from parents in the latter areas.

☐ Data generated from follow-up studies of special education graduates (Hasazi et al., 1985; Mithaug, Horiuchi, & Fanning, 1985; Wagner et al., 1991) have come to play a vital role in the development of policy for school programs and transition planning. Because of the relative importance of these data to the profession, it is important to carefully examine the methods by which follow-up studies are conducted. Many excellent reviews of survey research and follow-up methods exist (e.g., Babbie, 1973; Bruininks, Wolman, & Thurlow, 1990; Dillman, 1978; Fowler, 1984; Halpern, 1990; Siegel et al., 1990). One of the issues that deserves closer examination, however, is the believability of different informants and the agreement between these informants (Bruininks et al., 1990).

The bulk of follow-up studies conducted in special education have used the parent or guardian—or a combination of parents, guardians, group care staff, relatives, and graduates—as the primary informant. There are advantages and disadvantages to the use of each group of respondents. Whereas the person with the disability is most often the focus of concern and would therefore be most likely to "know" where he or she resides, whether or not he or she is employed, and so forth, difficulties are often associated with interviewing individuals with disabilities (they are often more difficult to contact than their parents). On the other hand, although parents may be easier to find, they may not have complete information.

Does the source of information on the postschool status of special education graduates make a difference in the findings? Because it is time and energy consuming to conduct follow-up studies, and high contact rates are desirable but difficult to obtain, most investigators accept information from any source they can contact. This makes sense from a practical point of view, but the end result is sets of data collected from mixed informants, with few studies addressing the question of congruity of answers given by different respondents (particularly the parent and the graduate).

A follow-up study of people with hearing impairments (and a comparison group of people without disabilities) conducted by Bullis, Bull, Johnson, and Peters (this issue) addresses the agreement question within the perspective of the communication issues unique to that population. For the population of students with hearing impairments, Bullis et al. found relatively low correlations between parent and graduate responses on living situation (.77), an effectiveness rating (currently employed or attending postsecondary education) (.59), and a rating of general happiness (.38). They concluded that mixing parent and subject responses into an "integrated" data set may result in misrepresented data.

The purpose of the current study was to examine two sets of follow-up data (one collected at 5 years and one at 2 years postgraduation) from both the parent (or parent substitute) and the graduate. We then analyzed the agreement status between the responses.

Our study question was as follows: When two informants—the parent (or parent substitute) and the graduate—are asked the same question about a single event related to the graduate, to what extent do their answers agree?

1. What is the agreement between informants (parent or parent substitute and graduate) on three status variables (currently in school, currently employed, and current residence)?
2. What are the reasons for disagreements between parent (or parent substitute) and graduate responses on these variables?
3. What is the agreement between the two informants (parent or parent substitute and graduate) on the variables of salary, number of hours working, benefits, number of children, and marital status?

METHOD

Sample

The first sample consisted of 283 special education and 349 regular education students who graduated from three school districts (one urban and two suburban) in Washington State in June 1985. The special education sample included all students in the three districts who had individualized education programs (IEPs) at the time of graduation. The regular education graduates were randomly selected from the total regular education 1985 graduation list, using the random number generator of SPSS-PC+. In the urban school district, randomization was also stratified by the gender distribution of the special education graduates (70% male).

The second sample consisted of 205 special education and 261 regular education students who graduated from the same three districts in 1990. As with the 1985 cohort, the special education students were all the IEP students who graduated (or aged out) in 1990; and the regular education students were selected as were the 1985 cohort.

Location. The three school districts were located in one county of Washington State having 1.5 million people. District 1 was an urban setting with a population of 0.5 million and a median income of $19,100. Districts 2 and 3 were both suburban settings with populations of 120,000 and 90,000, respectively. The median incomes for these districts were $19,000 for District 2 and $38,000 for District 3.

Instrumentation

Computer-Assisted Questionnaires. Interview scripts were modified for this study from questionnaires used in previous studies (Affleck, Edgar, Levine, & Kortering, 1990). The scripts were incorporated into a computer program using the data entry module of SPSS-PC+. This application enabled the computer programmer to develop a screen form based on the questionnaire scripts by naming the variables, labeling the items, and providing a context for placement of data. A "skip and fill" branch (based on logic statements) was used to enter commands that during data entry generated conditional or unconditional display of messages skipping to nonsequential items and assigning values when necessary.

Two types of messages were displayed: first, the actual questions to be asked by the interviewer, which were customized to be responsive to previous questions and answers; and second, instructions to the interviewers, which were dependent on previous actions and used for direction only. The entire system was further customized by using another branch of data entry, allowing for screens to be personalized with the students' names, gender, school district, and sequence number. Project staff field-tested the questionnaire, using a paper-and-pencil format with seven subjects prior to programming the scripts into the computer. The process was tested and refined to be sensitive to as many potential situations as possible.

In addition to being an efficient data-collection and entry program, the computer also functioned as a record-keeping system, provided data downloads and references, and contained files that displayed the contact results for each subject (e.g., the names and particular time or day of those who requested to be called back).

Variables. Demographic information was obtained from the school districts and included students' gender, primary disability, birthdate, and ethnicity, as well as parents' name, address, and phone number. The information requested in the interview focused on the postschool experiences of the graduates; the graduates' current employment status, including job title, salary, hours working, and benefits offered; postsecondary education, experiences, residential status, marital status, and number of children.

Procedure

The special education directors in the three school districts provided master lists of the graduates. We mailed letters of consent to every graduate and his or her parents. For those subjects for whom a response was not received, we requested consent at the time of the interview.

Training of the Interviewers. Each interviewer received 8-12 hrs of training that included instruction in the survey instrument and practice in interview techniques, such as specific probing styles, responses to inquiries, and methods of handling difficult or unique situations. Training continued on a tutorial basis between staff and data collectors. Simulated interviews were conducted, using the telephone headpieces. All interviewers were assessed during a minimum of three mock interviews created to simulate potentially difficult situations. The supervisor observed several real interviews, noting the interviewers' accuracy, competence (in both computer and script handling), and phone interview manner and provided suggestions and feedback.

Reliability. A minimum of four reliability checks were obtained for each interviewer, for a total of 23 interviews, resulting in a 98% agreement for the 1985 cohort, and 26 interviews, resulting in a 99% agreement for the 1990 cohort.

Interviews. Interviews were conducted between January and June 1991 (5.5 to 6 years postgraduation) for Study 1 and between January and June 1992 (1.5 to 2 years postgraduation) for Study 2. First, we attempted to interview the graduate's parent. If the parent was unavailable or inappropriate then a "parent substitute" was interviewed. These included guardians, other relatives (grandparent, aunt, uncle), foster parents, and group home directors. Second, attempts were made to contact and interview each graduate.

Detailed notes were kept regarding all interview attempts, including the time and date the attempt was made, the result of the attempt (i.e., a wrong number, a specific time to call back, a referral to a more appropriate contact person), and possible leads for another phone number or contact person. When an attempt resulted in a wrong or disconnected phone number, the data collectors consulted telephone books, directory assistance, the Cole directory (1986), and the Polk directory (1985). The data collectors pursued all possible phone numbers. Final efforts to contact the special education graduates and their parents were made by two data collectors who visited the address provided by the school district, spoke to neighbors, and telephoned other graduates or friends of the subject who might know the subject's whereabouts. Multiple attempts were made for each subject and parent until all reasonable possibilities were exhausted.

Second Interview. A preliminary cross-tabulation of parent and graduate responses was conducted for three primary variables: current attendance in school, employment status, and residence. In cases of "disagreement" (parent and graduate providing contrary responses) we contacted the graduates again and probed for details concerning the discrepancy.

Analysis

Interobserver Agreement. A Cohen Kappa statistic (Bakeman & Gottman, 1986) was used to determine the percentage of agreement between the parent and subject. Bakeman and Gottman wrote:

> The major conceptual reason for assessing interobserver agreement . . . is to convince others as to the "accuracy" of the recorded data. The assumption is, if two naive observers independently make essentially similar coding of the same events, then the data . . . should reflect . . . something more than one

> individual's unique and perhaps strange way of seeing the world. (p. 71)

Though we were not working with "observers" per se, we were trying to assess the ability of two independent persons (the parent and the subject) to respond similarly to questions regarding the same events (i.e., the subject's postschool experiences). The second reason for establishing interobserver agreement was of a practical nature: calibration. "When different observers [respondents in this case] are used to collect the same kind of data, we need to assure ourselves that the data collected do not vary as a function of the observer" (Bakeman & Gottman, 1986, p. 72).

Agreement and Reliability. Bakeman and Gottman (1986) distinguish between the terms *agreement* and *reliability*, the former simply implying that the responses of two observers are compared with each other, the latter being a comparison against a standard that is assumed to represent "truth." In follow-up studies, there can be no assumptions of "truth" without attempting third-party observations or interviews. As Bakeman and Gottman put it, "When two observers independently agree, the usual presumption is that they are therefore accurate (even though it is possible, of course, that they simply share a similar but nonetheless deviant world view)" (p. 74). In their follow-up study, Haring and Lovett (1990) conducted interviews with employers when a discrepancy occurred between interviews with parents and graduates; but the authors did not report the agreement status between the informants.

Percentage of Agreement. There are two major arguments against using agreement percentage scores exclusively. First, assuming that you have defined what an agreement is, it is still unclear what the actual numerical outcome means. According to Bakeman and Gottman (1986), because "too many factors can affect the percentage of agreement—including the number of codes—comparability across studies is lost" (p. 76). In our study, for example, we would expect a very high agreement percentage on questions that require a simple "yes" or "no" but would not have the same expectations for questions with more variability in the answer options, like residence or salary. The second (and perhaps the most important) disadvantage to the usage of agreement percentages is that "they do not take into account the part of the observed agreement that is due just to chance. [In other words, depending on the coding strategies,] . . . some agreement would occur by chance alone . . . and agreement percentage scores do not correct for this" (Bakeman & Gottman, 1986, p. 76).

Cohen's Kappa. Cohen's Kappa is an agreement statistic that does correct for chance. That is, "it compares the obtained level of agreement from a set of observations to what one would expect to have gotten by chance" (White, 1992, p. 3). It is a stringent statistic appropriate for testing point-by-point agreement.

The general rule of thumb, when judging Kappas, is to consider Kappas of .40 to .60 as fair, .60 to .75 as good, and over .75 as excellent (Fleiss, 1981).

Data Analysis Strategy. The data were initially grouped by year of graduation and by special education and regular education graduates, and summed across district for analysis. The data were then separated by disability category and district, and the analysis was repeated. With few exceptions, the grouped data proved to be representative; therefore, the group data are presented here by year of graduation, with reference to the exceptions.

RESULTS

Contact Results

Dyads. For the first study the total number of special education dyads, whereby interviews were obtained for both parent (or parent substitute) and graduate, was 114, representing 66% of the 172 contacts (and 40% of the 283 total possible). The total number of regular education dyads was 144, representing 80% of the 180 contacts (and 41% of the 349 total possible). For the second study, the total number of special education dyads was 109, representing 70% of the 163 contacts (and 53% of the 205 total possible). The total number of regular education dyads was 138, representing 82% of the 181 contacts (and 53% of the total possible). See Table 1 for the total data on contact rates.

TABLE 1
Contact and Dyads by Disability Category

Disability Category	*Total Possible*	*Total Contact*	*% of Total Possible*	*Total Dyad*	*% of Total Contact*	*% of Total Possible*
1985 Cohort						
Multiple disabilities	15	11	73	2	18	13
Severe mental retardation	10	7	70	2	29	20
Moderate mental retardation	23	16	70	5	31	22
Orthopedic disabilities	3	2	67	2	100	67
Health impairment	8	5	63	4	80	50
Hearing impairment/deafness	10	6	60	2	33	20
Vision impairment/blindness	1	1	100	1	100	100
Mild mental retardation	28	20	71	13	65	46
Behavior disorder	13	7	54	5	71	38
Learning disability	172	97	56	78	80	45
Total special education	283	172	61	114	66	40
Total regular education	349	180	52	142	79	41
1990 Cohort						
Multiple disabilities	11	8	73	2	25	18
Severe mental retardation	2	2	100	0	0	0
Moderate mental retardation	16	16	100	6	38	38
Orthopedic disabilities	8	5	63	3	60	38
Health impairment	9	6	67	4	67	44
Hearing impairment/deafness	7	5	71	3	60	43
Vision impairment/blindness	0	0	0	0	0	0
Mild mental retardation	20	13	65	11	85	55
Behavior disorder	15	14	93	12	86	80
Learning disability	117	86	74	68	79	58
Total special education	205	155	76	109	70	53
Total regular education	261	169	65	138	82	53

Agreement Results

Question 1. What is the agreement status between informants (parent or parent substitute and graduate) on three status variables?

a. Currently in school. Table 2 shows that there was a high agreement rate (89% to 96%) and excellent Kappas (.76 to .88) for all four groups, with an exception of a good Kappa (.67) for the 1985 special education group. There were no major differences found in the district or the disability analysis.

b. Currently employed. As with attending school, there were few differences between the four groups, the agreement ratings were high (90% for all groups), and the Kappas were good for the 1985 cohort (.71 and .75) and excellent for the 1990 cohort (.77 and .79). There were no major differences noted in the district or disability analysis.

c. Current residence. The 1985 cohort had slightly lower agreement and Kappa ratings than the 1990 cohort. For the 1985 cohort, District 2 special education was lower than the other districts (68% agreement, Kappa of .60); and graduates labeled with mild mental retardation were lower than the other types of disabilities (69% agreement, a Kappa of .49).

Question 2. What are the reasons for disagreements between parent (or parent substitute) and graduate responses on these variables?

Four major reasons were found for disagreements among the respondents. The most promi-

TABLE 2
Agreement Percentages, Cohen Kappas, and Reasons for Disagreement

Variable	N	*Total No. Agree*	*% Agree*	*Cohen Kappa*	*Total No. Disagree*	*No. Wrong Information*	*No. Don't Know*	*No. Date*	*No. Coding Change*
				1985 Cohort					
Special Education									
Currently in school	114	104	91	.67	10	4	1	5	0
Currently employed	114	103	90	.75	11	4	2	5	0
Current residence	114	93	82	.75	21	7	0	3	11
Regular Education									
Currently in school	142	127	89	.76	15	6	1	8	0
Currently employed	142	128	90	.71	14	4	2	8	0
Current residence	142	114	80	.74	28	7	0	6	15
				1990 Cohort					
Special Education									
Currently in school	109	104	95	.88	5	2	0	1	2
Currently employed	109	98	90	.79	11	5	0	6	0
Current residence	109	99	91	.80	10	5	0	2	3
Regular Education									
Currently in school	138	132	96	.86	6	2	1	3	0
Currently employed	138	124	90	.77	14	6	0	8	0
Current residence	138	125	91	.86	13	6	0	3	4

Note: Kappa key: .40-.60—fair; .61-.75—good; .76 and over—excellent.

nent reason was the date of the interview. In these cases, the respondents disagreed because the circumstances had changed between the interview times. The second most common reason for disagreement was wrong information given by the parent. Third, there were cases of data entry or coding misinterpretations, especially for the category of current residence. Fourth were the parents' reporting that they did not know.

Question 3. What is the agreement status between the two informants (parent or parent substitute and graduate) on other variables?

High agreement percentages and Kappas were obtained for marital status and for number of children. There were lower rates of agreement and Kappas concerning the number of hours working, salary, and medical benefits (see Table 3).

DISCUSSION

High-Agreement Items

Employment, attendance in postsecondary programs, place of residence, marital status, and number of children seem to generate high rates of agreement between parent and graduate respondents. The Kappas for these items were all in the good to excellent ranges. These findings are more positive than those reported by Bullis et al. (1992). Our findings provide a reasonable justification to researchers to continue to use mixed informants in collecting follow-up data on these variables.

Low-Agreement Items

The Kappas for hours worked and benefits were only in the fair range and therefore must be viewed with some skepticism. The salary variable obtained unacceptable Kappas and should cause researchers and policy makers to seriously doubt data collected from a mixed group of informants on this variable. This finding raises serious problems for researchers and policy makers because income level is an important marker that reflects the level of independence that a person may expect to achieve. The data from this study indicate that parents do not provide accurate information on this variable, usually because they

TABLE 3
Agreement Percentages and Cohen Kappas

	Special Education					Regular Education				
Variables	N	*No. Don't Know*	*No. Agree*	*% Agree*	*Cohen Kappa*	N	*No. Don't Know*	*No. Agree*	*% Agree*	*Cohen Kappa*
					1985 Cohort					
Number of children	114	0	112	98	.95	142	0	139	98	.82
Marital status	114	0	111	97	.92	142	0	138	97	.88
Hours: Part or full time	81	3	68	84	.59	105	5	94	90	.76
Medical benefits	81	10	62	77	.50	105	11	83	79	.55
Salary: < or > $180 per week	81	31	43	56	.18	105	42	56	53	.12
					1990 Cohort					
Number of children	109	0	108	99	.94	138	0	137	99	.80
Marital status	109	0	109	100	—	138	0	138	100	—
Hours: Part or full time	58	4	45	78	.53	83	4	72	87	.67
Medical benefits	58	10	42	72	.36	83	3	71	86	.51
Salary: < or > $180 per week	58	22	32	55	.20	83	23	54	65	.43

Note: Kappa key: .40-.60—fair; .61-.75—good; .76 and over—excellent.

do not know the information. This was true for parents of both the special and regular education students. For the special education parents, 53 of 139 (38%) said they did not know the salary level of their child; for the regular education parents, 65 of 188 (35%) claimed not to know salary level. This finding suggests that available databases on salary levels must be considered of questionable utility. We simply do not know the actual salary level of the graduates from databases in which the parent was the primary informant. Future researchers who want to collect believable information on income level and other information related to employment benefits must choose the graduate as the primary source of the information.

Disability-Related Issues

Other than the low agreement on place of residence for students with mild levels of mental retardation, there were no differences noted among the various types of disabilities. We assume, therefore, that type of disability is not a factor in choosing informant. Of course, we must point out the small numbers of graduates with disabilities in the categories of behavior disorders, severe mental retardation, orthopedic disabilities, health disabilities, hearing impairment, and vision impairment. These small numbers represent the reality of local school districts; there are few graduates (or age outs) in these categories. However, the small numbers cause the agreement statistics to be suspect. Logic would indicate that for the more severe disabilities, graduates would be less likely to provide detailed information. (On inspection of the missing data for dyads, where we had data from only one source, we noted that for the categories of students with moderate and severe levels of retardation, and students with multiple disabilities, there was a high rate of missing data from the graduate, indicating our lack of ability to interview the graduate.) Parents of these students are likely to be closely involved in the day-to-day lives of their adult children, and hence more knowledgeable of the details than would parents of individuals with less severe disabilities.

Differences Between Special Education and Regular Education Graduates

There were minor differences in the agreement rates between the special education sample and the regular education sample. This finding adds to the growing database on the overall commonalities between populations identified as "special education" and "regular education."

Timing of Data Collection

The data collected 18 months after graduation resulted in slightly higher Kappas as compared to the data collected at 5 years after graduation. This higher agreement probably results from closer contact between parents and their young adult children immediately after graduation as compared to 5-6 years after graduation. There were no significant differences between the two data sets, however; thus, the conclusions drawn from this study apply to timeframes ranging from 1 to 6 years from the time of graduation. It appears that parents keep track of their adult children for a considerable time after graduation from high school (at least with the sample that we were able to interview).

Veracity

This study did not address directly the issue of veracity. To pursue veracity as an issue, we would need to triangulate our data sources, that is, conduct interviews with a third party, such as an employer, a roommate, or a college counselor, or collect records such as pay stubs or rental agreements. We chose not to attempt this form of triangulation. However, given the relatively high percentage of agreements and strong Kappas, it seems unlikely that both the parents and the graduate provided identical wrong information on the questions we asked. Rather than wrong information, the issue seems to be knowledge of the more precise information, such as salary level and types of benefits received. We believe that our data represent reality and can be considered true for the population we interviewed. The question remains, however, whether the sample we interviewed adequately represents the entire population of special education graduates.

Missing Data

A troubling aspect of this study (and indeed of all follow-up studies) is missing data. In this study, there were two sources of missing data. First, and most troubling, was the issue of our inability to contact a higher number of the total possible graduates. In the first study, we were able to contact 61% of the total special education cohort. This is a low contact rate, but we exhausted all possible avenues to obtain it. Our contact rate improved significantly for the second study, increasing to 80% of the total sample—largely because these were recent graduates and thus easier to locate. We have conducted a missing-data analysis on the subjects we were not able to locate (41% of the special education and 49% of the regular education group for the 1985 cohort, and 23% of the special education and 38% of the regular education group for the 1990 cohort). We compared these missing subjects to the students for whom we had data from at least one respondent and found no differences as to disability category, gender, ethnicity, and school district. However, we have no other data on the missing subjects that we could analyze to compare them to the subjects for whom we do have data. Low contact rates invariably call into question the generalization of the findings to the larger population.

The lower contact rates for the population without disabilities is due to a bad tactical decision during the initial data-collection phase. We planned to collect data on a comparable number of regular education graduates as special education graduates from the same districts. We were successful in this endeavor, except that we gave up trying to locate difficult-to-reach regular education subjects and, instead, randomly added additional regular education subjects. This resulted in a lower contact percentage for the regular education graduates (52% for the first study and 69% for the second study). Thus, although our special education and regular education *N*s are equal, our contact rates are unequal, and the regular education graduates represent individuals *easier* to contact than the special education group.

Whereas inability to contact was one source of missing subjects, a second source was our inability to establish dyads. There were numerous reasons for this, including unwillingness of one member of the dyad to participate, language difficulties of one of the potential members, and inaccessibility of one member. As was reported earlier, our contact rates for dyads was relatively low, 40% for the 1985 cohort and 53% for the 1990 cohort. To explore the impact of these missing data, we analyzed the data for dyads as compared to single-source informants. For example, we looked at the employment data to see if the dyads represented the employed more than the unemployed. We repeated this form of analysis on all the major variables, by gender, by disability, and by school district. There were a few significant differences by disability: for "independent living" and "not employed," there were fewer students without disabilities represented in dyads; for "independent living" and "not in school," there were fewer students with learning disabilities represented in dyads; there were no students with multiple disabilities represented in dyads for "not employed"; in general, students with moderate and severe levels of mental retardation and students with multiple disabilities were underrepresented in dyads. There were no other significant differences. We are not exactly sure how to evaluate these findings; our intuition tells us that our data are probably slightly optimistic because of our low dyad contact rate.

CONCLUSION

Mixing informants for answers to questions about postgraduates, such as employment status and place of residence, does not seem to be a problem. This is good news for those who conduct follow-up studies, as well as those who use data from follow-up studies to make decisions. Although the general, broad-based follow-up data can be trusted, the more personal or specific data, such as salary level and types of benefits received, must be viewed with skepticism. Because of the number of parents who do not know this information, we should only use data from graduates to address these questions. This raises a troubling issue: There is a tendency for policy makers to use existing databases even when there is reason to doubt the believability of the data. Databases from studies that did not use graduate informants on salary levels, hours worked, and benefits received should be considered invalid, based on the findings of this study. And because graduates are more difficult to locate than are parents, future studies that follow this advice will likely be more costly and will probably have lower contact rates. Unless we are willing to wait for these new studies using graduate informants, we must seek other methods by which to measure specific and important aspects of postschool quality of life.

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ABOUT THE AUTHORS

PHYLLIS LEVINE, Project Coordinator, Center for Disability Policy and Research; EUGENE EDGAR, Professor of Education, Special Education Area, University of Washington, Seattle.

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Correspondence concerning this manuscript should be addressed to Eugene Edgar, Experimental Education Unit WJ-10, University of Washington, Seattle, WA 98195.

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Marietta Esposito Peskin
Director, Development Disorders Program
College of Education and Human Services
Seton Hall University
400 South Orange Avenue, South Orange, NJ 07079
Equal Opportunity/Affirmative Action Employer

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Appendix 7

An Analysis by Gender of Long-term Postschool Outcomes for Youth with and Without Disabilities

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An Analysis by Gender of Long-Term Postschool Outcomes for Youth with and Without Disabilities

PHYLLIS LEVINE
EUGENE EDGAR
University of Washington

ABSTRACT: This study analyzed gender differences in postschool outcomes for youth with learning disabilities, mild mental retardation, and no disabilities. Data were collected on two cohorts of graduates (549 youth who were graduated in 1985; 398 youth, in 1990) from three school districts. Data were collected at 1, 2, 6, and 7 years postgraduation. Comparisons were made between genders within disability groups on employment, postsecondary education attendance and graduation, engagement, independent living, marital status, and parenting. In contrast to the findings of other studies, few significant differences were noted between genders, except for the parenting category. A similar analysis between youth by disability category resulted in considerably more significant differences.

In the past decade, investigators conducting follow-up studies of youth served by special education have reported differential postschool outcomes by gender. In a series of studies conducted by Hasazi and colleagues in Vermont (Hasazi, Gordon, & Roe, 1985a; Hasazi et al., 1985b; Hasazi, Johnson, Hasazi, Gordon, & Hull, 1989), female special education students were reported to do significantly less well than their male counterparts. For example, Hasazi et al. (1985a) found an overall employment rate of 65% for former students with learning disabilities and mild mental retardation; when the data were analyzed by gender, however, the rates were twice as high for males (66%) than for females (33%). Hasazi et al. (1985b) reported similar findings in their second study, with an overall employment rate of 46% for subjects with mild and moderate mental retardation, a 56% rate for the males, and a 23% for the females. In a third study, comparing employment rates of former special education students to a cohort with no disabilities, Hasazi et al. (1989) found that even though the employment rates of males with and without disabilities were similar (73% and 88%, respectively), less than half as many young women (30%) with disabilities were employed compared to their female peers without disabilities (63%). Similarly, Nisbet and Lichtenstein (1992) reported full-time employment for 38% of male graduates with learning disabilities, compared to 16% of their female peers. More than twice as many females as males were working part time. On a national scale, Wagner et al. (1991) reported that 52% of the males and only 22% of the females in their study were employed full time 3-5 years after exiting high school.

The purpose of the current study was to explore the differences in postschool outcomes between males and females with learning disabilities, mild mental retardation, and no disabilities, while controlling for several factors not addressed by the earlier studies (a separate data analysis by disability, consistency of time since graduation from high school, and similarities between the groups of young people—with and without disabilities).

METHOD

The data set used in this study is part of a larger project entitled *The First Decade After Graduation*. The Decade Project is finishing its third year of a federally funded 5-year longitudinal follow-up of two cohorts of students who are graduates of special and regular education high school programs.

The Decade Project-Gender Substudy

Sample. The Decade Project sample comprises two cohorts of young people who graduated from three school districts (one urban and two suburban) in Washington State. The special education sample included all students in the three districts who had individualized education plans (IEPs) at the time of graduation and had been classified in one of the 10 disability categories defined in the Washington Administration Code. For this gender substudy, graduates from special education identified at the time of graduation as having mild mental retardation (MMR) or learning disabilities (LD) were included. We attempted to conduct interviews for all graduates with MMR or LD from both cohorts from each of the three school districts. The graduates with no disabilities (ND) were randomly selected from the regular education graduation lists from the same school districts for the same graduation years. The sample consists of the following: Cohort 1 comprises 28 youth with MMR, 172 youth with LD, and 349 youth with ND who graduated in June 1985. Cohort 2 comprises 20 youth with MMR, 117 youth with LD, and 261 youth with ND who graduated in June 1990.

Outcome Variables. The information requested in the interview focused primarily on the postschool experiences of the graduates. In particular, we solicited information about the graduates' current and previous employment status; postsecondary education, training, and graduation credentials; residential status; and marital and parenting status, defined as follows:

- *Employment* is defined as working at least 1 hr per week in a capacity that pays a wage. Included are competitive employment, supported employment, and sheltered workshop. (This was the general definition we used for the overall study. For this substudy all 643 of the employed youth were in competitive employment. The majority of the graduates were working more than 20 hr per week (95% of the 1985 cohort and 60% of the 1990 cohort), and there were no significant differences between genders and disability groups.)
- *Postsecondary education* comprises attendance in some form of postsecondary school or training. These include community college; university; business, vocational, or trade school; or Job Corps.
- *Postsecondary graduation* status is considered if a degree or diploma is received, including specialized certifications or licenses.
- *Engagement* is defined as employment, attending postsecondary education, or both.
- *Dependent/independent living* is defined by the graduate's residence, which is the home in which the subject spends the majority of his or her time. Residence is coded as dependent (living in parent's home, with other relatives, or in a foster home, in a group home, tenant support, or incarcerated in prison) or independent (in a house or apartment alone, or with friends, roommates, a spouse, or partner; in a dormitory or barracks; or employer-provided, e.g., on a fishing boat; or traveling).
- *Marital status* is defined as currently married, or not married.
- *Parenting status* is defined as having children living in the graduate's household and dependent on the graduate for their care.

Instrumentation: Computer-Assisted Interviews. Interview scripts were modified for this study from questionnaires used in previous studies (Affleck, Edgar, Levine, & Kortering, 1990; Neel, Meadows, Levine, & Edgar, 1988). We incorporated the scripts into a computer program by using the data-entry module of Statistical Package for the Social Sciences: Personal Computer (SPSS-PC+). Project staff field-tested the questionnaire, using a paper-and-pencil format with seven subjects, before

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programming the scripts into the computer. The process was tested and refined to be sensitive to as many potential situations as possible.

Procedure

The special education directors in the three school districts provided master lists of the graduates. We mailed letters of consent to the parents of every graduate. For those graduates from whom a response was not received, we requested consent at the time of the interview. Two interviews were conducted 12 to 16 months apart from each other and expressed relative to the number of years after graduation that the interview occurred.

Training of the Interviewers. Five interviewers were responsible for the majority of the first round of interviews. One of these interviewers and two new interviewers were responsible for the majority of the second round of interviews. Each interviewer received 8-12 hr of training that included instruction in the survey instrument and practice in interview techniques, such as specific probing styles, responses to inquiries, and methods of handling difficult or unique situations. Training continued on a tutorial basis between staff and interviewers. We conducted simulated interviews by using the telephone headpieces. All interviewers were assessed during a minimum of three mock interviews created to simulate potentially difficult situations. The supervisor observed several real interviews, noting the interviewers' accuracy, competence (in both computer and script handling), and phone interview manner and then provided suggestions and feedback.

Reliability. We obtained a minimum of four reliability checks (using taped interviews) for each interviewer for each cohort. Interviewers conducted 23 interviews for the 1985 cohort, resulting in 98% agreement, and 26 interviews for the 1990 cohort, resulting in 99% agreement.

First-Round Interviews. Interviews were conducted between January and June 1991, approximately 5.5-6 years postgraduation for the 1985 cohort, and 6-12 months postgraduation for the 1990 cohort. First, we attempted to interview the contact person for every graduate, except those who had indicated (by letter or telephone) that they did not wish to participate. The "informant" was the person who was considered to be most familiar with the graduate's current situation, as well as his or her situation at the time of graduation. In most cases, this person was the graduate's parent. If the parent was unavailable or inappropriate (e.g., a stepparent who was not in contact with the graduate) a "parent substitute" was interviewed. These included guardians, other relatives (grandparent, aunt, uncle), foster parents, and group-home directors. In cases where a parent or parent substitute was unavailable, we attempted to contact and interview the graduate. We kept detailed notes for all interview attempts, including time and date, result (e.g., a wrong number, a specific time to call back, a referral to a more appropriate contact person), and possible leads for another phone number or contact person. When an attempt resulted in a wrong or disconnected phone number, the data collectors consulted telephone books, Directory Assistance, the Cole Directory (Cole Publications, 1986), and Polk's Directory (Polk, 1985). The data collectors pursued all possible phone numbers. As a last resort, to contact the special education graduates, two data collectors visited the address provided by the school district, spoke to neighbors, and telephoned other graduates or friends of the subject who might know the graduate's whereabouts. We made multiple attempts for each subject and parent until we exhausted all reasonable possibilities. For the regular education subjects, an additional 42 graduates in the 1985 cohort and 36 graduates in the 1990 cohort were randomly selected to match by gender and year of graduation the special education graduates interviewed.

Year 2 Interviews. About 1 year after the first interviews were conducted (January to March 1992), we attempted to contact and interview all (and only) the subjects who had been successfully interviewed the previous year.

Analysis Strategy

For the types of variables being examined in this substudy, descriptive analytic methods are appropriate. For example, for each variable (e.g., employment) across each group (e.g., Cohort 1, males and females with LD), frequencies, percentages, cross tabulations, and chi-square tests of independence were conducted. Percentages

TABLE 1
Contact Rates for Subjects by Disability and Gender

	Cohort 2: 1990 Graduates			*Cohort 1 1985 Graduates*		
Disability and Gender	*Total Possible* N	*Total Contact* n	*Final Contact Rate* %	*Total Possible* N	*Total Contact* n	*Final Contact Rate* %
Mild mental retardation						
Males	7	5	71	16	10	63
Females	13	8	62	12	9	75
Total	20	13	65	28	19	68
Learning disability						
Males	86	67	78	125	62	50
Females	31	19	61	47	27	57
Total	117	86	74	172	89	52
No disability						
Males	162	104	64	209	107	52
Females	99	65	66	140	62	44
Total	261	169	65	349	169	48

are expressed relative to the specific group under study. Overall, we present the findings by disability, gender, cohort (year of graduation), and years since graduation.

RESULTS

Contact Results

Informant. All interview data were obtained by telephone interviews with key informants who knew the status of the graduate's current life situation. The majority of the informants were mothers (67% of 1985 graduates, 71% of 1990 graduates), but also included fathers, other relatives, and, in a few instances, the graduates themselves.

Informant Agreement. In an earlier study (Levine & Edgar, 1994), we determined that there was a high degree of agreement (as measured by Cohen Kappa statistic—.40-.60 = fair; .61-.75 = good; .76 and above = excellent; Bakeman & Gottman, 1986) between graduate report and the report of other informants on the following variables. For the 1985 graduates, with and without disabilities respectively, agreement was as follows: employment (.67, .71), attendance in school (.75, .76), residence (.75, .74), marital status (.92, .88), and parenting status (.95, .82). For the 1990 graduates, with and without disabilities, respectively, agreement was as follows: employment (.79, .77), attendance in school (.88, .86), residence (.80, .86), and parenting status (.94, .80). However, for both cohorts and all disability categories, low agreement was found for number of hours worked (range of .53 to .76), medical benefits (range of .36 to .55), and salary (range of .12 to .43). A large percentage of parents and other informants do not know this information. As a result, we have decided not to include the variables of number of working hours, salary, and benefits in our analyses.

Contact Rates. All the data included in the following analyses are for graduates who were available at both data-collection points. Table 1 shows the contact rates for the second (final) interview conducted for each subgroup.

The final contact rates for the 1985 graduates for the three disability categories by gender ranged from 44% for the females with ND to

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TABLE 2
Missing Subjects for the First Interview by Disability and Gender

	Cohort 2: 1990 Graduates				*Cohort 1: 1985 Graduates*			
Disability and Gender	*Total Possible* N	*Total Contact* n	*Contact Rate* %	*Missing Subjects* n	*Total Possible* N	*Total Contact* n	*Contact Rate* %	*Missing Subjects* n
Mild mental retardation								
Males	7	6	86	1	16	11	69	5
Females	13	9	69	4	12	9	75	3
Total	20	15	75	5	28	20	71	8
Learning disability								
Males	86	71	83	15	125	69	55	56
Females	31	20	65	11	47	27	57	20
Total	117	91	78	26	172	96	56	76
No disability								
Males	162	112	69	50	209	114	55	95
Females	99	69	70	30	140	66	47	74
Total	261	181	69	80	349	180	52	169

75% for the females with MMR. The final contact rates for the 1990 graduates ranged from 61% for females with LD to 78% for males with LD. Chi-square analyses revealed no significant differences among the contact rates for the three disability groups for both cohorts.

Missing Subjects. A troubling aspect of this study (and indeed most follow-up studies) is missing data. In this study, we found two sources of missing data. First, and most troubling, was our inability to contact a higher number of the total possible graduates. As Table 2 shows, for the first interview (including subjects interviewed once only), we were able to contact 71% of the 1985 graduates with MMR, 56% with LD, and 52% with ND. These are low contact rates, yet we exhausted all possible avenues to locate subjects. Our first interview contact rates were higher for the 1990 cohort—increasing to 75%, 78%, and 69% for graduates with MMR, LD, and ND, respectively. Although we found no differences between the cohorts for graduates with MMR, chi-square analyses showed significant differences between cohorts for graduates with LD, $p < .0001$, and for graduates with ND, $p < .0001$. The higher contact rates for these subjects in the 1990 cohort probably resulted from the provision of more accurate addresses and phone numbers by the school districts, and because these were recent graduates and thus easier to locate. Overall, our low contact rates call into question the generalization of the findings to the larger population.

Missing Subjects for Interview 1. We have conducted a missing-data analysis between the subjects we were not able to locate and those for whom at least one respondent was contacted (Table 2) as to disability category, gender, ethnicity, and school district.

Cohort 1—1985 Graduates. For the 1985 cohort, chi-square analyses revealed no significant differences among the three disability groups, none between the three disabilities and gender, the three disabilities and ethnicity, and the three disabilities and the three school districts. When analysis was conducted between pairs of disability groups, the only significant difference found, $p < .05$, was between the contact rates for graduates with MMR (71%) and graduates with ND (52%). The lower contact rate for the cohort with ND resulted from a tactical decision we made during the

TABLE 3
Subject Attrition Between Interviews 1 and 2 by Disability and Gender

	Cohort 2: 1990 Graduates				*Cohort 1: 1985 Graduates*			
		Interview				*Interview*		
		1	*2*	*Attrition*		*1*	*2*	*Attrition*
Disability and Gender	N	n	n	n	N	n	n	n
Mild mental retardation								
Males	7	6	5	1	16	11	10	1
Females	13	9	8	1	12	9	9	0
Total	20	15	13	2	28	20	19	1
Learning disability								
Males	86	71	67	4	125	69	62	7
Females	31	20	19	1	47	27	27	0
Total	117	91	86	5	172	96	89	7
No disability								
Males	162	112	104	8	209	114	107	7
Females	99	69	65	4	140	66	62	4
Total	261	181	169	12	349	180	169	11

initial data-collection phase. In this case, because only 28 young people with MMR were graduates in this population, we intensified our attempts at contacting these families. On the other hand, because there was a large pool of graduates with ND to choose from, we did not pursue difficult-to-reach subjects, and we randomly added additional subjects. This resulted in unequal contact rates, with the graduates with ND representing individuals easier to contact than the graduates with MMR.

Cohort 2—1990 Graduates. For the 1990 cohort, chi-square analysis revealed significant differences in two comparisons. For graduates with LD, a larger proportion, $p < .05$, of males was contacted (83%) than females (65%). When gender was examined among disability groups, a significant difference was found in the contact rates among males, $p < .05$, with MMR (86%), LD (83%), and ND (69%). As was true for the 1985 cohort, this difference probably reflects the addition of graduates with ND to the original sample.

Subject Attrition. The second source of missing data was related to the loss of subjects between the first and second interviews (Table 3). An analysis of this attrition was conducted between subjects with one interview and subjects with two interviews for four outcome variables, plus gender, and school district. For the 1985 graduates, there were no significant differences between the subjects in employment, postsecondary school attendance, engagement, and residence; or for gender and school district for all three groups. No differences were found for the 1990 graduates with LD and MMR, however, for the graduates with ND, significant differences were found for three variables. Of the 12 subjects with only one interview, 92% were employed, compared to 59% of the subjects with two interviews, $p < .05$. Conversely, more subjects with two interviews were attending school (76%) compared to subjects with one interview only (33%, $p < .001$). This may influence both the current and long-term employment rates of the graduates with ND in this cohort, because we retained a larger percentage of subjects attending school. Further, differences were found among the districts, with half the lost subjects coming from each of two districts, and none from the third, $p < .05$. This, too, may influence the data, if graduate outcomes are related to their school district.

Research Findings

Question 1: Are there differences in postschool status between males and females within disability groups? In conducting this analysis, we set the significance level at $p <$ .001 because of the number of chi-square analyses conducted (over 77) (Table 4). We have reported the p values of .01 and .05 for the convenience of the reader who might be interested in those levels and to demonstrate that even at these lower significance levels there are few meaningful postschool outcome differences between males and females within the same disability groupings. The only differences noted (when using the .001 level of significance) were employment in favor of males with LD over females with LD for the 1985 cohort in Year 6, engagement in favor of the males with LD over females with LD for the 1985 cohort in year 6 (the same group as above), and parenting in favor of the females with LD over the males with LD in the 1985 cohort for Years 6 and 7 (again, the same group). We address these apparent differences in the Discussion section.

Question 2: Are there differences among disability groups for males and females on postschool status? Table 4 shows the comparisons for males and females among the three disability groups. For each variable, 8 comparisons were made between pairs of disability groups—4 points in time each for males and females (e.g., females with LD vs. females with MMR in Year 1; females with LD vs. females with ND in Year 6, etc.). Using the $p <$ .001 level of significance (we made 162 comparisons), we found more differences in outcomes between disability groups than were found between genders.

In general, the group of graduates with ND did better than either the graduates with LD or MMR in a number of areas. The most notable are attendance in postsecondary education for the 1990 cohort, graduation from postsecondary programs for the 1985 group, graduation with a BA for the 1985 group, and engagement levels for both cohorts, especially the females. The only area where differences were noted in favor of the group with disabilities as compared to the group without disabilities is parenting for the 1985 cohort of females with LD and for parenting without marriage for the same group.

DISCUSSION

Are there gender differences in postschool outcomes of youth with similar disabilities?

The primary purpose of this study was to determine if males and females with and without disabilities have significantly different postschool experiences in the years following high school. Contrary to the bulk of reports in the literature, the data from this study revealed few significant differences between males and females.

The only significant differences were found between males and females with learning disabilities in the 1985 cohort. The males were employed and engaged at higher rates than their female counterparts in Year 6. Parenting provides a partial explanation for the differences found in the employment and engagement rates of this group, because the females were parenting more in both Years 6 and 7. Put into the context of engagement, 63% (n = 17) of the 27 female 1985 graduates with learning disabilities were engaged 6 years after high school. But of the 10 "unengaged" women, 9 (90%) were parenting children. Thus, only 1 of the "unengaged" females was actually not engaged in "work" or school as the definition implies. If we include parenting in our definition of "engaged," the percentage of engaged females with learning disabilities at Year 6 would rise from 63% to 96%.

These data raise serious questions as to how to report women who are parenting and neither working nor attending school. These individuals are actively and appropriately engaged. However, further inspection of the data reveals that among the female graduates with learning disabilities who were parents, many were unmarried (not living with partners) and not working or attending school. For the 1990 cohort, 100% of the parenting graduates (3 in Year 1 and 4 in Year 2) were in this situation; and for the 1985 cohort, 33% (5) in Year 6 and 47% (7) in Year 7 were unmarried and not working or attending school. The implications from these data are that young women with learning disabilities are at risk for becoming mothers at an early age with-

TABLE 4

Summary Table Including Chi-Square Comparisons of Pairs—Gender and Disability—1990 and 1985 Cohorts

Cohort and Disability Group	*Males*			*Females*			*Chi-Square Significant Differences for Pairs*						
							X^2 Difs Between M-F	*X^2 Differences Between Disability Groups for Each Gender*					
								Males			*Females*		
	N	n	%	N	n	%	M-F	MMR-LD	MMR-ND	LD-ND	MMR-LD	MMR-ND	LD-ND
	Employment												
1990 Cohort													
Year 1													
MMR	5	2	40	8	2	25						$p < .05$	
LD	67	40	60	19	12	63							
ND	104	54	52	65	45	69	$p < .05$						
Year 2													
MMR	5	3	60	8	2	25				$p < .05$		$p < .01$	
LD	67	48	72	19	12	63							
ND	104	58	56	65	51	79	$p < .01$						
1985 Cohort													
Year 6													
MMR	10	6	60	9	5	56		$p < .05$					
LD	58	53	91	27	17	63	$p < .001$						
ND	105	85	81	61	49	80							
Year 7													
MMR	10	6	60	9	4	44		$p < .05$	$p < .05$			$p < .05$	
LD	58	51	88	27	20	74							
ND	105	91	87	61	50	82							

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TABLE 4
(Continued)

Postsecondary Education							M-F	MMR-LD	MMR-ND	LD-ND	MMR-LD	MMR-ND	LD-ND
1990 Cohort													
Year 1													
MMR	5	0	—	8	2	25			$p < .001$	$p < .0001$		$p < .05$	$p < .001$
LD	67	25	37	19	5	26							
ND	103	81	79	65	46	71							
Year 2													
MMR	5	1	20	8	0	—			$p < .05$	$p < .0001$		$p < .001$	$p < .0001$
LD	67	19	28	19	2	11							
ND	103	80	78	65	45	69							
1985 Cohort													
Year 6													
MMR	10	0	—	9	1	11			$p < .05$	$p < .05$			$p < .001$
LD	61	12	20	27	0	—	$p < .01$						
ND	107	39	36	61	20	33							
Year 7													
MMR	10	0	—	9	1	11			$p < .05$				$p < .05$
LD	61	9	15	27	2	7							
ND	107	29	27	61	17	28							

Engagement							M-F	MMR-LD	MMR-ND	LD-ND	MMR-LD	MMR-ND	LD-ND
1990 Cohort													
Year 1													
MMR	5	2	40	8	4	50		$p < .05$	$p < .001$	$p < .001$		$p < .001$	$p < .01$
LD	67	56	84	19	15	79							
ND	104	102	98	65	64	98							
Year 2													
MMR	5	3	60	8	2	25					$p < .05$	$p < .001$	$p < .0001$
LD	67	57	85	19	13	68							
ND	104	95	91	65	64	98							

TABLE 4
(Continued)

Engagement (continued)							M-F	MMR-LD	MMR-ND	LD-ND	MMR-LD	MMR-ND	LD-ND
1985 Cohort													
Year 6													
MMR	10	6	60	9	6	67		$p < .05$	$p < .05$			$p < .05$	$p < .001$
LD	62	57	92	27	17	63	$p < .001$						
ND	107	98	92	62	58	93							
Year 7													
MMR	10	6	60	9	5	56		$p < .05$	$p < .001$			$p < .05$	
LD	62	57	91	27	20	74	$p < .05$						
ND	107	104	97	62	55	89	$p < .05$						

Independent Residence							M-F	MMR-LD	MMR-ND	LD-ND	MMR-LD	MMR-ND	LD-ND
1990 Cohort													
Year 1													
MMR	5	1	20	8	2	25				$p < .001$			$p < .01$
LD	67	20	30	19	2	11							
ND	104	60	58	65	29	45							
Year 2													
MMR	5	1	20	8	2	25				$p < .01$			
LD	67	25	38	19	6	32							
ND	104	61	59	65	36	55							
1985 Cohort													
Year 6													
MMR	10	3	30	9	5	56			$p < .05$				
LD	62	36	57	27	19	70							
ND	107	70	65	62	41	66							
Year 7													
MMR	10	3	30	9	4	44			$p < .05$				
LD	62	37	60	27	21	78							
ND	107	73	68	62	45	73							

TABLE 4
(Continued)

Graduation							M-F	MMR-LD	MMR-ND	LD-ND	MMR-LD	MMR-ND	LD-ND
1985 Cohort													
Year 6													
MMR	10	1	10	9	2	22			$p < .05$			$p < .05$	$p < .01$
LD	62	19	31	27	8	30							
ND	107	48	45	62	38	61	$p < .05$						
Year 7													
MMR	10	1	10	9	2	22			$p < .01$	$p < .05$		$p < .01$	$p < .001$
LD	62	24	39	27	8	30							
ND	107	58	54	62	43	69							
Credentials							**M-F**	**MMR-LD**	**MMR-ND**	**LD-ND**	**MMR-LD**	**MMR-ND**	**LD-ND**
1985 Cohort													
Certif. or Lic.													
MMR	10	1	10	9	1	11				$p < .05$			
LD	62	17	27	27	5	19							
ND	107	16	15	62	11	18							
AA													
MMR	10	0	—	9	0	—							
LD	62	4	7	27	3	11							
ND	107	11	10	62	5	8							
BA													
MMR	10	0	—	9	0	—				$p < .0001$		$p < .05$	$p < .001$
ND	107	28	26	62	24	39							

TABLE 4
(Continued)

Parenting							M-F	MMR-LD	MMR-ND	LD-ND	MMR-LD	MMR-ND	LD-ND
1990 Cohort													
Year 1													
MMR	5	0	—	8	1	13							$p < .05$
LD	67	2	3	19	3	16	$p < .05$						
ND	104	1	1	65	1	2							
Year 2													
MMR	5	0	—	8	2	25				$p < .01$		$p < .05$	$p < .01$
LD	67	7	10	19	4	21							
ND	104	1	1	65	1	2							
1985 Cohort													
Year 6													
MMR	10	0	—	9	3	33	$p < .05$						$p < .0001$
LD	62	4	7	27	15	56	$p < .001$						
ND	107	4	4	62	8	13	$p < .05$						
Year 7													
MMR	10	0	—	9	3	33	$p < .05$						
LD	62	7	11	27	15	56	$p < .001$						$p < .001$
ND	107	6	6	62	11	18	$p < .01$						

TABLE 4
(Continued)

Parenting Without Marriage: Females Only				MMR-LD	MMR-ND	LD-ND
1990 Cohort						
Year 1						
MMR	8	1	13			
LD	19	3	19			$p < .05$
ND	65	1	2			
Year 2						
MMR	8	2	25			
LD	19	4	21		$p < .05$	$p < .01$
ND	65	1	2			
1985 Cohort						
Year 6						
MMR	9	1	11			
LD	27	5	19			
ND	62	6	10			
Year 7						
MMR	9	1	11			
LD	27	7	26			
ND	62	7	11			
Parenting With Marriage: Females Only						
1985 Cohort						
Year 6						
MMR	9	2	22			
LD	27	10	37			$p < .0001$
ND	62	2	3			
Year 7						
MMR	9	2	22			
LD	27	8	30			$p < .01$
ND	62	4	7			

Note. M-F = males and female; MMR = mild mental retardation; LD = learning disabilty; ND = no disability. Engaged is defined as employed, attending postsecondary school, or both.

out benefit of a supportive partner or financial resources.

Thus the only gender difference we were able to detect appears to be due to women with learning disabilities being more prone to single parenthood than other groups. If this is a true reflection of the situation, efforts to delay pregnancy among this population must become a major focus of educational and other human service programs.

Are there differences by disability in the postschool outcomes for youth?

The data we have presented indicate differences in some outcomes between graduates with mild mental retardation and learning disabilities, and between graduates with disabilities and their peers without disabilities. Surprisingly, there were no reported differences in employment. The data on the graduates with learning disabilities as compared to the graduates without disabilities are amazingly similar. We suspect the low number of graduates with mild mental retardation accounts for the nonstatistical differences with the graduates without disabilities and perhaps the graduates with learning disabilities. (Low numbers of low-incidence subjects plague all research such as this. We attempted to contact all the special education graduates labeled as mildly mentally retarded in the three districts and were reasonably successful. There simply are few such students in school districts.)

The areas showing differences between the graduates with disabilities and those without disabilities are attendance at postsecondary education and graduation from these postsecondary programs, especially as to type of degree earned. It also appears that females with disabilities are somewhat less engaged than their counterparts without disabilities; as demonstrated earlier, however, this "lack" of engagement is probably due to parenting. We do need to point out that because we did not do an analysis of salary levels, our data cannot speak to the issue of the quality of the employment. Our unsubstantiated belief is that graduates with disabilities earn less than do those without disabilities.

Comparisons to Other Follow-Up Studies

The findings from this study are contrary to other studies that have consistently reported that, overall, males outperform females in postschool outcomes, that males with disabilities far outperform females with similar disabilities, and that youth without disabilities have far superior outcomes as compared to youth with disabilities (Haring & Lovett, 1990, Hasazi et al., 1985a, 1985b, 1989; Nisbet & Lichtenstein, 1992; Scuccimarra & Speece, 1990; Sitlington & Frank, 1990; Wagner, 1992; Wagner et al., 1991). We were surprised with our findings.

Of course, differences exist in all the reported studies that may account for the variance in the findings. These differences include geographical regions and years when the studies were conducted, definitions of employment, measures of salary and hours worked, the combination of subjects with different disabilities or the length of time from graduation, the selection of comparison groups of youth without disabilities, and the method of data analysis. The question is, do these variations account for the differences in the findings or are some results more believable than others? The general professional opinion seems to be that there are major gender differences within disability groups. If this belief is unfounded, or due to some very specific reasons, efforts to ameliorate the problem may be misguided or even superfluous. A reasonable use of the existing follow-up data on special education graduates is as a comparison for local efforts at reform (e.g., the Transition Initiative). Certainly local data are more appropriate for this comparison than data from other locales; but when these "other data" are used as a baseline, there should be some notion of the believability of the data. So, which data to believe?

We have tried to be as detailed as possible about the methods we used in this study so that readers can judge the believability of our data. Following is a brief summary of our impressions of the strengths and weaknesses of our study.

- *Strengths.* We attempted to include all the special education graduates from three school districts and two graduating cohorts, we randomly selected the comparison group of graduates without disabilities from the same high schools and the same graduating cohorts; we collected two data points over 2 years for each subject; our subjects were out of school for 1-6 years; we analyzed all data by gender, type of disability, and time from graduation; we presented data on missing subjects; we used a conservative significance level but reported other, more liberal *p* values for reader information.

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- *Weaknesses.* The study involved a limited geographic location; a small number of subjects with mild mental retardation; no data on income levels; and a large number of missing subjects.

The following discussion compares the present results with those of previous studies on several dimensions, including employment, postsecondary education, engagement, independent residence, and parenting.

Employment. Perhaps the most widely cited research concerning the issue of employment status between genders and graduates with and without disability is the work of Hasazi and her associates. In the two studies published in 1985 (Hasazi et al., 1985a, 1985b), the authors reported significant differences (using chi-square) between employment rates of males and females with disabilities. In both cases, however, subjects were analyzed as a group, regardless of the number of years since graduation or specific disability. In their first study (1985a), the authors also reported significant differences between subjects who were served in three different types of special education programs (indicative of their level of functioning); and in their second study (1985b), they reported significant differences between subjects with mild and moderate mental retardation. In both studies, because Hasazi et al. did not analyze gender separately for these subgroups, it is difficult to know whether the gender differences were simply a reflection of disproportionate ratios of males to females within the disability levels.

In the third study (Hasazi et al., 1989), the authors reported a gap between employment percentages of males and females with disabilities 1 year after exiting high school, but they did not find significant differences until a second interview conducted the following year. Again, subjects with varying disabilities were combined, distorting our ability to interpret the findings. For example, 37% of their sample ($n = 25$) were identified as youth with learning disabilities, but only 3 of those subjects were female. Thus, their data will be skewed when analyzed by gender, because youth with learning disabilities (primarily male in their study) generally have higher employment rates than do youth with mental retardation. Nevertheless, the authors claimed:

> Gender is significantly related to later employment for both handicapped and nonhandicapped students [chosen from the same schools as the subjects with disabilities], with males consistently more likely to be employed than females, although the degree of difference was greater for handicapped students. (Hasazi et al., 1989, p. 253)

In fact, they did not find significant differences between male and female students with no disabilities.

Claims of gender differences for employment rates are made by follow-up researchers Nisbet and Lichtenstein (1992), Haring and Lovett (1990), Scuccimarra and Speece (1990), and Sitlington and Frank (1990). Nisbet and Lichtenstein reported employment rates for graduates with learning disabilities as full time (16% female, 38% male) and part time (40% female, 18% male). Although this is an important distinction (and one that needs further attention), data in this study regarding the number of hours graduates are working may be of questionable validity because the investigators used mixed informants. In fact, refiguring the employment rates combining part- and full-time employment resulted in identical percentages (56%) for both males and females. In the other three studies, the employment percentages of the males and females with disabilities were reported respectively as follows: Haring and Lovett (1990), 75% versus 48%; Scuccimarra and Speece (1990), 91% versus 52%; and Sitlington and Frank (1990), 81% versus 66%. Though these percentages appear different, none of the investigators included a statistical analysis to test for significance. In addition, Haring and Lovett, as well as Scuccimarra and Speece, combined disability groups and time since exiting high school in their analyses.

In the study conducted by Kranstover, Thurlow, and Bruininks (1989), the rates of paid employment for males and females were almost identical; but women worked, on average, fewer number of hours per week: 36 versus 41 for the males (again, these data may be suspect, depending on how they were obtained). However, the only significant difference was that more females were also reported as homemakers. The authors did not indicate whether the women who were homemakers were also caring for children. In this study, too, disability groups and subjects who had been out of school from 1 to 8 years were analyzed together.

Wagner (1992) reported gender differences for employment rates of subjects in the National Longitudinal Transition Study (NLTS) at two time periods (less than 2 years postschool, and 3-5 years postschool). Significant differences were reported at both points, but only when all disability groups (including subjects with sensory and health impairments, behavior disorders, and all levels of retardation) were analyzed together. When gender analysis was conducted for subjects with learning disabilities and mental retardation separately, no significant differences were found between males and females for employment at either interview. However, Wagner (1992) claimed that the "NLTS findings demonstrate that the experiences of young women with disabilities differ significantly from those of their male counterparts during secondary school and in the early years afterward" (p. 2). The author continued, "NLTS findings demonstrate that young women with disabilities exhibited a markedly different pattern of experiences after leaving school than did their male counterparts with disabilities" (p. 3). These statements may be applicable for students served by special education as a whole; but because of the diversity inherent in the disability categories, claims of gender differences for specific subgroups may be misleading.

Postsecondary Education. Though the majority of studies cited previously claimed gender differences in employment rates, none reported significantly differential attendance rates between males and females in postsecondary education. In their analysis of the NLTS data, Fairweather and Shaver (1991) also found low rates of attendance in postsecondary education for all their subjects with disabilities; these researchers stated that "males and females do not differ significantly in their participation rates" (p. 268) (14% for the males and 18% for the females). Likewise, Nisbet and Lichtenstein (1992) reported postsecondary participation rates for males and females with disabilities as 8% and 14%, respectively.

Although participation in postsecondary programs is important, only one other study mentioned graduation rates or credentials two factors with potentially greater influence on postschool success than participation alone. In their analysis of the NLTS data, Wagner et al. (1991) claimed that their subjects were not out of high school long enough to earn baccalaureate degrees and they therefore could not examine this variable. They reported, however, that despite similar participation rates of males and females in postsecondary vocational schools (and higher grades earned by the females), a larger percentage of males (57%) than females (26%) earned a vocational degree or license. These findings are difficult to interpret in isolation. Do the females take longer than the males to complete postsecondary vocational schools? Or do they continue their programs to prepare for higher degrees? Or, as indicated by the higher percentage of parenting by females in the NLTS (Wagner, 1992), do they drop out to bear children? Wagner et al. did not report completion rates by specific disability, so these percentages may be offset by the disproportionately high number of males with learning disabilities.

Engagement. When Kranstover et al. (1989) compared males and females with disabilities on several engagement variables (in the military, unemployed but seeking employment, unemployed and not seeking employment, paid employment, and other employment), the only significant finding was for homemakers (47% female vs. 14% male), though we do not know if this includes parenting.

Independent Residence. Only one study reported gender differences in independent residence for subjects with disabilities. Hasazi et al. (1985b) found significantly more females with disabilities residing independently (18%) than males (6%), explained in part by the higher percentage of females who were married (12% vs. 2%).

Parenting. The NLTS reported that females with disabilities are five times as likely to be parenting than their counterparts without disabilities and are significantly more likely to be single parenting (Wagner, 1992). These findings are congruent with our findings.

SUMMARY OF FINDINGS

The bulk of the literature has concluded that males and females with disabilities differ in their postschool outcomes; but differential employment, marriage, and parenting rates are the only findings consistently reported. No differences were reported for postsecondary attendance or for independent residence; and only one study (Wagner, 1992) discussed engagement rates related to parenting status. The majority of the studies have focused on income; and we have evidence that suggests these data are of questionable validity (Levine & Edgar, 1994). We believe there are no differences between genders in the postschool outcomes of youth with learning disabilities and mild mental retardation other than as these outcomes are affected by early parenting of the female graduates.

A comparison of employment data (without salary levels) seems to indicate no differences between graduates with learning disabilities and those without disabilities. We did find significant differences in postsecondary attendance and graduation rates between these two groups in favor of graduates without disability. This finding leads us to conclude that there is (or certainly will be) a significant discrepancy in the salary levels of high school graduates with learning disabilities and mild mental retardation in favor of the graduates without disabilities.

Recommendations for Practice

This study inspires more questions than answers. More follow-up research is needed to address numerous issues. On the other hand, school districts cannot passively wait for future studies to provide direction for current practices. In an attempt to limit our recommendations to topics supported by our data, we make the following suggestions for secondary programming and transition planning:

1. Develop options to the mainstream precollege curriculum for students with low probability of attending postsecondary education programs. Our data indicate that few special education graduates successfully graduated from postsecondary education programs. Yet, in our experience, most special education students with learning disabilities and mild mental retardation are included in the regular high school precollege program. We believe that secondary programs should offer curriculum options for all students who are not planning to attend college to prepare them for employment immediately after high school.
2. Developing powerful pregnancy prevention programs should be a priority. This is an emotionally laden topic that will require educators, parents, students, and other community leaders to come together to discuss options and details. We do not advocate for any blanket coverage program but rather that each school openly and honestly bring the topic to the table. We believe that every female special education student should have a pregnancy-prevention plan specified on her IEP. This plan would be developed in total cooperation with the student, the school, and the parents. The parents and student should maintain total control over this plan. But there should be a plan. Equal attention should be given to developing responsible parenting programs for males.
3. Individual school districts should focus more on the outcomes of their programs. Special education programs should focus their attention on what happens to their students after they exit school. Districts should engage in follow-up studies of their own graduates and use these data to refine their programs.

Recommendations for Research

As for researchers, we recommend the following:

1. Employment rates are useful in that they provide a perspective on current activity for a group of youth. Specific employment data regarding salary levels, number of working hours, types of benefits provided and by whom, types of jobs obtained initially and over time, promotion opportunities, and level of satisfaction give a much richer picture of postschool outcomes. Investigators need to explore ways to obtain these data, perhaps through the use of ethnographic techniques.
2. Clearly there is more to life than employment. We need to explore the effects of other factors that affect our quality of life, such as social interaction, opportunities to join groups or participate in community activities, recreation and leisure, friendships, contentment, and so forth. In addition, the characteristics of the school and the district, its programs, staff, funding, physical surroundings, and attitudes will influence the

postschool outcomes of the students who attend it. Further, we need to examine the impact of the multiple components of family and community on long-term adjustment.

3. We need information on the long-term effects of postsecondary schooling and credentials on postschool adjustment for youth with disabilities.

CONCLUSION

The data from this study imply that gender differences in long-term outcomes for youth with mild mental retardation, learning disabilities, and no disabilities (as measured by rates of engagement in employment, school, and independent residence) may be more mythical than real, and that a greater source of influence may be disability category. However, both the results and the intricacies of this study illustrate the complexities of the issue and the urgent need to continue asking questions. Whatever the truth may be, the professional community must resist the temptation to accept simple explanations for complex societal problems.

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ABOUT THE AUTHORS

PHYLLIS LEVINE (CEC WA Federation), Project Coordinator for Center for Disability, Policy, and Research, School of Public Health and Community Medicine, and EUGENE EDGAR (CEC #389), Professor,

College of Education, University of Washington, Seattle.

Address correspondence to Eugene Edgar, EEU, WJ-10, University of Washington, Seattle, WA 98195.

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POINT/COUNTERPOINT

On Rhetoric: A Response to Fuchs and Fuchs

STEVEN J. TAYLOR
Syracuse University

The article by Fuchs and Fuchs on the "inclusive schools movement" published in the February 1994 issue of *Exceptional Children* was neither fair nor scholarly. It attacked the proponents of inclusive education, rather than debating the issue.

Fuchs and Fuchs have employed some common rhetorical devices in their article. Let me identify several.

CREATE THE VILLAIN

In the Fuchs and Fuchs version of our field, the villain is the leadership of The Association for Persons with Severe Handicaps (TASH), portrayed as a small band of chanting loudmouths who are out of touch with reality and out of step with everyone else. According to Fuchs and Fuchs, TASH "took the field by storm no doubt intimidating by their vigor alone many who disagreed with their radical message" (p. 299). Fuchs and Fuchs argued that the views of the TASH leadership—"a relatively small and insular group" (p. 301)—are so extreme that they do not represent the views of many members of their own association. In one of the many misleading statements in the article (p. 301), Fuchs and Fuchs supported this latter assertion by depicting Stainback, Stainback, and Moravec as TASH leaders and Lou Brown (see Brown, 1991) as an insignificant and ignored rank-and-file member of the association. Juxtaposed against TASH in the Fuchs's article were The Council for Exceptional Children (CEC) and other associations that may not share TASH's position statements or the views of some of its members. In an article published in *Exceptional Children*, this seems like an attempt to play to the audience.

ACADEMIC SLEIGHT OF HAND

When Fuchs and Fuchs offered evidence to support their position, which was rare, it was seldom relevant to the discussion. An obvious example was their attempt to discredit inclusive education through the citation of newspaper stories, commentaries, and the testimony of a psychiatrist on the failure of deinstitutionalization.

Throughout their article, Fuchs and Fuchs discussed educational policy regarding the "high incidence" and "low incidence" groups and referred to associations concerned with people with severe developmental disabilities (TASH), learning disabilities (the Learning Disabilities Association), blindness (American Council on the Blind), deafness (Commission on the Education of the Deaf), or children with exceptional needs (CEC). Yet, grasping for evidence of the inevitable failure of inclusive education, Fuchs and Fuchs compared it to the policy of deinstitutionalization for *adults with mental illness*. Fuchs and Fuchs wrote, "deinstitutionalization has caused more than 250,000 people with schizophrenia or manic-depressive illness to live in shelters, on the streets, or in jails" (p. 302).

A fairer comparison would have examined the evidence on deinstitutionalization of people with developmental disabilities. No scholarly study of deinstitutionalization of people with developmental disabilities has confirmed the horrific findings reported by Fuchs and Fuchs. The research evidence has indicated that people with developmental disabilities in community settings fare better than their counterparts in

Appendix 8

The Post-School Status of High School Graduates with Learning Disabilities a Decade After Graduation

Running Head: Post School Status of Learning Disabled Graduates

The Post-School Status of High School Graduates with Learning Disabilities A Decade After Graduation

Eugene Edgar and Christopher Murray

University of Washington

Abstract

This longitudinal study examined the post high school graduation status of the 1985 and 1990 graduating classes from 3 large school districts in the Northwest United States. Both cohorts included all of the graduates who were identified as learning disabled (N=289) in their respective graduating classes and a stratified random sample of non disabled graduates from these same graduating classes (N=611). A computer assisted telephone survey instrument was developed to elicit information on the employment, attending post-secondary education programs, and parenting status of the graduates. These interview took place once a year for a duration of five years beginning in 1991. Results on employment rates indicated that, as a group, students identified as learning disabled were employed at a rate that was competitive in relation to their non disabled peers. Results on engagement rates (employed and/or in school) indicated that students identified as learning disabled had a significantly lower engagement rate than their non disabled peers. Results on engagement with mothering included indicated that students identified as learning disabled had a significantly lower engagement rate during some of the post graduation years and an equal or higher engagement rate in other years as compared to their non disabled peers. These results

indicate that post school status of youth identified as learning disabled, as well as their status as compared with their non disabled peers, is dependent upon the variables under study.

The Post-School Status of High School Graduates with Learning Disabilities A Decade After Graduation

The general consensus in the field of special education is that special education graduates experience less favorable post-school outcomes than their non disabled peers. This belief has been reinforced by numerous follow-up studies of special education graduates and has resulted in the Transition Initiative and other Federal and State level actions with the focus on improving the post school outcomes of special education youth. We applaud these efforts and believe special educators and others need to continue these efforts. However, we believe new data are available that call into question some of the fundamental beliefs of the special education field. The purpose of this article is provide a new data set on youth with learning disabilities who have been out of high school for ten years.

Review of the Literature

Employment

There are a number of studies that have examined the post-graduation employment status of adults who have been identified as disabled. The most extensive of these, Wagner et al. (1992), included an original sample of more than 8,000 youth identified as disabled; of this original sample, a nationally representative subset of postsecondary school students (n=1,750 to 1,950; n changed according to area studied) was sampled. Data were collected on these youth after they had been out of school from 0 to 2 years and again after they had been out from 3 to 5 years. At the time of the first interview, data were collected on 337 adults who had been identified as learning disabled (LD), 59.2% were employed either full or part time during the previous year. At the time of the second interview (3 to 5 years post-graduation), 70.8% of the LD youth (n = 322) had been employed during the previous year. The researchers then analyzed the data by gender and found that female LD adults had lower employment rates at each interview, 44.3% for 0 to 2 years out and 52.4% for 3 to 5 years out, than males 63.9% for 0 to 2 years out and 76.9% for 3 to 5 years out.

In another large scale study of post-graduate status in Iowa, Sitlington and Frank (1990) examined the outcomes of 909 adults who were identified as learning disabled and who had been out of school for one year. These researchers found that 77% of the adults were employed. When gender was considered, females had a lower employment rate of 66% than males 81%. In 1995, Frank, Sitlington and Carson again examined the employment status of these LD graduates after they had been out of school for 3 years. These later findings indicated that 85% of the LD graduates were employed

Schalock et al. (1986) examined the employment status of 65 graduates who had been identified as learning disabled from 10 rural Nebraska schools. These graduates had been out of school from 1 to 5 years. A majority (72%) of the graduates reported being employed.

In a Washington D.C. area school district, Scuccimarra and Speece (1990) observed that of the 65 LD graduates in their study, 78.5% were employed 2 years out of high school. These findings were then analyzed by gender where it was found that females had an employment rate of 52.4% while males, as a group, were employed 90.9% of the time.

Another study, Shapiro and Lentz (1991), examined the employment rates of youth identified as learning disabled who had participated in a vocational-technical education program prior to high school graduation. These youth were compared with a second group of vocational-technical education students (non disabled) as well as a regular education group (non disabled). Two cohorts of graduates were interviewed at the time of graduation and again at 6, 12, and 24 months following high school graduation. These researchers found that the employment rates for the learning disabled graduates ranged from 51% at graduation to 91% two years after graduation for cohort 1, and for the LD graduates in cohort 2 the range was from 73% at graduation to 93% one year after graduation (Note: these rates excluded all subjects who were enrolled in 2 and 4 year colleges as well as subjects who were in the military full time).

Lastly, Haring and Lovett (1990) studied the post-school employment outcomes of 129 adults in the Southwest United States who had been identified as disabled. Of these youth 64 were learning disabled and they had an employment rate of 64% with females again employed at a lower rate (48%) than males (75%).

These studies found generally similar employment rates for youth labeled learning disabled up to 5 years after graduation from high school. Taken as a whole the employment rates for LD graduates varied from 59% to 85%, with the higher rates being associated with those youth who had been out of high school for a longer period of time. Males with learning disabilities always had higher employment rates than females with learning disabilities: for males the range was 64% to 90% and for female the range was 44% to 66%.

Engagement

In addition to examining the employment status of youth identified as learning disabled we also examine the engagement rates of these youth. Sitlington and Frank (1990) defined "engagement" as someone who was a homemaker, student, or in job training. Of the total number of LD youth who were questioned regarding employment in their study, 77% were employed and an additional 9% were meaningfully engaged one year out of high school.

Parenting

Wagner et al. (1992) examined the post-graduate parenting status of youth who had been out of school from 3 to 5 years. Of the adults who had been identified as learning disabled, 27% were parenting, with females parenting at a higher rate (50%), than males (19%).

Sitlington and Frank (1990) also reported the "homemaker" status of 880 learning disabled graduates who had been out of high school for one year. Their findings indicated that 2% of those interviewed described themselves as homemakers. (Note: these data were not reported by gender)

Current Study

The primary focus of the current study is on the post school employment status, and engagement status (employed and/or attending school or training) of graduates who have been identified as learning disabled. Additionally, we examine the related issue of mothering. Specifically, we examine the post-school engagement rates of graduates and then we add mothering to this category as an additional engagement activity (employed and/or in school or training and/or mothering). Our primary research questions are:

1. Are there differences in the employment rates of youth with learning disabilities as compared with non disabled youth during the first ten years after high school graduation?

2. Are there differences in the engagement rates (employed and/or in school or training) of youth with learning disabilities as compared to non disabled youth during the first ten years after high school graduation?

3. Are there differences in engagement rates when mothering is added to engagement (employed and/or in school or training and/or mothering) of youth with learning disabilities as compared to non disabled youth during the first ten years after high school graduation?

Method

Participants

The data set used in this study is part of a larger study entitled The First Decade Project which has been discussed elsewhere (Levine & Edgar, 1994; 1995). The data set consists of two cohorts of graduates (1985 and 1990) from three school districts in the Northwest United States. All the special education graduates from these three school districts for the two year cohorts and a contrast group of randomly selected non-disabled graduates from the same graduating classes and the same districts were selected. In the Autumn of 1990 letters from the special education directors of the three school districts were sent to all the parents of the graduates requesting their participation in the study and requesting their informed consent. For those parents who did not respond to the initial letter a follow-up telephone call was made requesting their participation. Informed consent was obtained for all of the parents and graduates who participated in the study. The study reported in this article only addresses the non-disabled graduates (Original n=611) and the graduates with learning disabled (Original n= 289).

Missing subjects plague all longitudinal studies. There are two primary sources of missing subjects: those who were eligible for participation but who never were part of the study because they refused to participate or they could not be located; and those who participated in part of the study and then dropped out because they chose not to participate or they moved and could not be located.

After analyzing the attrition data the only significant differences were with the 1990 cohort in that the non-disabled group had a lower contact rate than the LD group and more males with LD were contacted than females with LD. An analysis of the attrition data (those subjects who dropped out of the study between year 1 and year 5) showed that for the 1990 cohort there was a significant attrition of non disabled males who were employed in the first interview. The low initial contact rates with the non disabled graduates was due to an erroneous decision to add subjects to the initial list when we experienced difficulty contacting the subjects. Thus the non disabled population is different from the special education group in that the non disabled graduates were those who were easier to initially contact than were the special education subjects. The basic data on these two cohorts are found in Table 1.

[Insert Table 1 here]

Design

We have combined the data from the three school districts after we conducted an analysis that indicated there were no significant differences in the data sets between the three districts. Also of import is the fact that we report data for a ten year time period using two discrete cohorts of subjects. The first five years after graduation from high school are represented by the 1990 graduating class and the second five years after high school graduation (years 6-10) are represented by the 1985 graduating class. The reader will have to determine if this representation is justifiable. This technique is a modification of a technique used by a National Institute of Justice study (Earls & Reiss, 1994) designated as an accelerated longitudinal study. In this technique different age cohorts are studied simultaneously in a longitudinal manner with the end of one age cohort overlapping the beginning age of the subsequent cohort by the end of the study. We have not presented overlapping data points between the two cohorts so our data presentation differs significantly from that of the National Institute of Justice study. Readers will have to decide if our design warrants the juxtaposition of our data.

Procedure

The data for this study were collected over a five year period (1991-1995) using telephone interviews with the parents of the graduates. The interviews were incorporated into a computer assisted program that allowed the interviewer to enter the data directly into the database. Reliability checks were conducted each year during which time a supervisor coded an interview concurrently with an interviewer and an agreement analysis was conducted for each coded interview. There were a minimum of four such checks for each interviewer each year of the study. The agreement percentages for these interviews ranged from 98% to 99% with a medium agreement of 98% for 49 reliability checks. The information requested in the interviews focused on the post-school status of the graduates: current employment, hours worked, wages, benefits, attendance of post-secondary education programs and graduation from such programs, degree earned, marital status, number of children and current living situation. In an earlier article on this data set, Levine & Edgar (1994), we determined high rates of agreement between the self-report of the graduate and the report of other informants on the following variables: employment, attending post-secondary education programs, marital status, parenting, and place of residence. Low agreement was found for: hours worked, salary, and benefits (the primary reason for this low agreement was that the other informants did not know the correct response).

Results

Question 1. Are there differences in the employment rates of youth with learning disabilities as compared with non disabled youth during the first ten years after high school graduation?

First we analyzed the employment rates for the non-disabled graduates and the graduates with learning disabilities for the entire ten years of data (see figure 1) (Note: the 1990 graduates are represented in the first five years and the 1985 graduates are represented in years 6-10). These data were then analyzed by chi-square analysis using an SPSS statistical program. The only significant difference in the employment rates were found in year 10 (see Table 2). In year 10, the non-disabled graduates had a significantly higher employment rate than the learning disabled graduates.

[Insert Figure 1 here]

Next, we analyzed the same data for females by category and males by category (see Figure 2). For the females, the non disabled females were employed at a significantly higher rate than the females with learning disabilities in years 4, 5, and 10 (see Table 2). For males, the males with learning disabilities were employed at a significantly higher rate than the males without disabilities in year 2.

We then analyzed the data by gender within category. For the learning disability group males were employed at a significantly higher rate than females in years 5, 6, 8, and 10. For the non disabled group, females were employed at a significantly higher rate during years 1, 2, and 4 but by year 10, the non disabled males were employed at a significantly higher rate than the non disabled females.

[Insert Figure 2 here]

[Insert Table 2 here]

Question 2: Are there differences in the engagement rates (employed and/or in school or training) of youth with

learning disabilities as compared with non disabled youth during the first ten years after high school graduation?

After completing our analysis on employment we then ran the same analysis on engagement rates. The first comparison, by category, is represented graphically in Figure 3. These data were then analyzed by chi-square comparisons using an SPSS statistical program (see Table 3). After adding school or training to employment there was only one year (year 8) that was not significant in favor of the non disabled graduates.

[Insert Figure 3 here]

Next, we analyzed the engagement rates for females by category, for males by category, and by gender within category (see Figure 4). For the females by category comparison the non disabled females had a significantly higher engagement rate than the females with learning disabilities in years 1 to 6 and in year 9. For the males by category comparison non disabled males had a significantly higher engagement rate than the males with learning disabilities in years 1, 3, 4, 5, and 10. By gender within category for the graduates with learning disabilities, males had a significantly higher engagement rate than the females in years 5, 6, and 8. For the non disabled group there was only one year, year 10, that was significant.

In this year (10), non disabled males had a significantly higher engagement rate than the non disabled females.

[Insert Figure 4 here]

[Insert Table 3 here]

Question 3: Are there differences in engagement rates, when mothering is added as engaged (employed, and/or in school or training and/or mothering) of youth with learning disabilities as compared to non disabled youth during the first ten years after high school graduation?

For our final analysis we added mothering to our engaged category. In order to be considered a mother the female graduate had to have one or more, of her birth children, living with her at the time of interview. In addition to examining the percentage of mothers by category, we also examined the percentage of mothers who were receiving public assistance. (Note: In year 1 (1990 cohort) less than 1% of the nondisabled males were parenting while 3% of learning disabled males were parenting; in year 5 less than 1% of the nondisabled males were parenting while 8% of the learning disabled males were parenting; by year 10 (1985 cohort) 11% of the nondisabled males were parenting while 23% of the learning disabled males were parenting. There were no cases of fathers receiving public assistance).

Overall, females with learning disabilities had a much higher rate of mothering compared to the non disabled females. For the 1990 cohort between 17% and 33% of females identified as learning disabled were mothering as compared to between 2% and 12% of the non disabled graduates over a 5 year period. In addition to having a higher mothering rate, the mothers with learning disabilities were also receiving public assistance at a higher rate than the non disabled mothers. For the 1990 graduates the LD mothers receiving public assistance ranged from 50% to 75% while none of the non disabled mothers were receiving public assistance.

For the 1985 cohort (years 6-10) between 54% to 58% of females with learning disabilities were mothering while non disabled females were mothering at a lower rate (range 12% to 25%). Again, when public assistance was considered, the mothers with learning disabilities were receiving funds at a higher rate (range 21% to 40%) than the nondisabled mothers (range 8% to 13%) over the 5 year period (see table 4) (Note: There were four years in which someone other than a mother was receiving public assistance in years 1, 4 and 6 one female identified as learning disabled was receiving assistance, and in years 4 and 8 there was one male identified as learning disabled who was receiving public assistance).

[Insert Table 4 here]

After including mothering as engaged we reran chi-squares using an SPSS statistical program. Our first analysis on engagement with mothering was by category. Percentages of engagement by category are represented graphically in Figure 5. For the category comparison, years 1 to 5 and year 10 were significant in favor of the non disabled graduates.

[Insert Figure 5 here]

Next, we recomputed all of the gender comparisons that involved females (Note: male only comparisons did not change from analysis 2). The gender by category engagement rates with mothering are represented by Figure 6. The female by category chi-square comparison indicated that there were two years, 4 and 5, that were significant in favor of the non disabled graduates. For the chi-square comparisons on gender within category on graduates there were no significant differences between males and females with learning disabilities. For the gender within category comparison on the non disabled graduates there were no significant differences between males and females without disabilities (see Table 5).

[Insert Figure 6 here]

[Insert Table 5 here]

Discussion

There are a number of serious limitations with our data. For example, we know that a large number, perhaps as large as 40%, of youth identified as learning disabled fail to graduate from high school. We present no data on this significant group of students. These non completers are a serious problem and our guess is that they are not employed at as high a rate as the graduates who were labeled as learning disabled. A second problem is related to missing subjects. While it is true that most longitudinal research has subject attrition, this does diminish our concern for the effect that these missing subjects had on our findings.

There are several strengths of this study. First, data are presented on youth up to ten years after graduation from high school. Secondly, data are reported on the year by year status of the youth without mixing data from several years. Thirdly, a group of youth not labeled as disabled, who attended the same high schools, graduated in the same years, and lived in the same communities are included to provide a comparison group for the youth with learning disabilities. The reader is cautioned to keep these weaknesses (and strengths) in mind when evaluating the results and our discussion.

Whatever we have found can best be described as relating to youth with learning disabilities who graduate from high school and are willing (and able) to stay in a longitudinal research study for five years. While we cannot describe how these youth differ from those who do not graduate or stay in a research study our guess is that there are substantial differences between these two groups of youth.

Employment

Comparing the employment rates over the ten years of the data collection it appears that the overall employment rate of the learning disabled group is comparable to the employment rate of non disabled group. In the 1990 cohort, graduates who were identified as learning disabled had a range in employment rates from 60% to 72% throughout the 5 year time period while the nondisabled graduates had a range in employment from 59% to 79% throughout this same time. In the 1985 cohort, graduates with learning disabilities had a range in employment rates from 73% to 85% while the non disabled graduates had a range in employment rates that ranged from 79% to 88%. The employment rates for youth with learning disabilities in this study are comparable to the rates reported in earlier studies. The comparison with the non disabled groups, however, allows for the conclusion that the youth with learning disabilities are not doing significantly worse than their non disabled peers. Furthermore, these findings indicate that all youth experience relatively high unemployment rates during the first decade after graduation from high school.

When these data were analyzed by gender, the males with learning disabilities had an employment rate that was higher than their nondisabled male peers in years 1 thru 8 (reaching 83% in year 8). Even in years 9 and 10, when many of the non disabled males had completed college, there were no significant differences in the employment rates for the male by category comparison.

In contrast to the males, the females with learning disabilities had substantially lower employment rates than the other subjects in the study, including the females without disabilities. In fact, there was no year where they had an equal or greater rate of employment than the other graduates. In two of the years the females with learning disabilities had extreme variation in their employment rates, a low of 33% in year 5, and a high of 80% in year 7, but the majority of years (excluding years 5 and 7) ranged from 55% to 65% employment. These employment rates are also similar to the earlier reported studies and this does raise the issue of some sort of gender biases for women with learning disabilities. This conclusion is substantially different from that drawn from an earlier report on a subset of these data (Levine and Edgar, 1995) when it appeared that there were no significant differences between males and females with learning disabilities.

While we were somewhat pleased with this initial outcome of competitive employment rates on the part of the LD graduates, and the LD males in particular, we also realized that employment as a measure of post-school status may have been an inadequate indicator of the post-school success of young adults. Two questions related to employment that need to be addressed are earnings/income and type of employment (part time/full time). This is a complex analysis and we are preparing another report that addresses the issues of earnings and part time/full time employment for the employed graduates. Employment rates, in isolation also do not address the issue of those youth who are attending some form of post-secondary education. This seemed especially true for the first five years following high school graduation, because a large number of non disabled graduates were not accounted for by the measure of employment.

Engagement

When data on those youth who were attending post-secondary school or training programs were added to the analysis the non disabled graduates showed superior engagement rates in adult behaviors. This clear difference between the graduates by category was entirely attributable to the post-secondary school and training rates of the non disabled graduates. When considering engagement with college and or training added to employment we now found that the graduates identified as learning disabled in the 1990 cohort had a range in engagement from 79% to 81% while the nondisabled graduates had engagement rates that ranged from 94% to 98%. For the 1985 cohort the results were similar with the engagement rates for the LD graduates ranging from 76% to 88% while the nondisabled graduates engagement rates ranged from 90% to 95%. With the addition of post secondary school or training attendance to employment the graduates with learning disabilities now appeared to be doing less well than their non disabled peers.

This also held true for the gender comparisons, males with learning disabilities, who had been employed at a rate that was similar to their nondisabled peers, were engaged a lower rate than both the nondisabled females and males in every year except year 8. In that year (8) males with learning disabilities had an engagement rate of 95% which was higher than the engagement rate of the nondisabled females (86%) and nondisabled males (94%). For the females with learning disabilities the addition of school or training to employment (engaged) served to further increase the disparity between them and their nondisabled peers.

This analysis indicated that the LD group, as a whole and by gender, were attending post-secondary programs at a much lower rate than their non disabled peers across the ten years following graduation. These lower post-school attendance rates of the graduates identified as learning disabled indicate that they are not gaining the skills (through education) that will lead to added success in the future. We suspect that over the long run, differences in employment (especially in the quality of employment) would continue to grow in favor of the non disabled graduates. Part of this question can be addressed by conducting an analysis of college graduates to non graduates on employment rates and levels of earnings. This analysis is complex as comparisons need to be made between youth who attended and did not graduate from college to those youth who graduated as well as to youth who never attended. Other analysis would need to include comparisons by type of post-secondary program (A.A. degree versus B.A. versus specialized vocational training). These data will be reported in a future manuscript.

Engagement with Mothering

Mothering is a valued adult activity, therefore, it was an essential addition to the category of engagement. When this variable was added as an engaged activity the overall engagement rate of the graduates identified as learning disabled for the 1990 cohort increased but remained significantly lower than the engagement rates of the non disabled graduates. For the 1985 cohort, however, the addition of mothering to engagement had the effect of increasing the engagement with mothering status of the learning disabled graduates substantially. In fact, the engagement with mothering rates of the graduates identified as learning disabled (1985 cohort) now ranged from 85% to 95% which was much more competitive with that of the non disabled graduates (range 92% to 97%).

When we further analyzed these data by gender, females with learning disabilities had an engagement status that was competitive with the non disabled females and males. But now the males with learning disabilities evidenced the lowest rates of engagement.

One concern that does arise from these data is the disproportionately higher mothering rate among females with learning disabilities as compared with the non disabled females. This concern is confounded by the fact that a larger percentage of these mothers were receiving public assistance (see Table 4). While this is obviously a value laden issue, it is one that deserves further attention. We believe that the high rate of parenting coupled with high incidences of public assistance among mothers with learning disabilities can be viewed as a negative outcome. Many of these young women are single parents without partners. In the 1990 cohort (years 1-5) 100% of the mothers were single in years 1 thru 3; in year 4 , 84% were single; and in year 5, 77% were single. For the 1985 graduates (years 6-10) the single parenting status of the learning disabled females ranged from 36% to 46%. These high incidences of mothering, public assistance, and single parenting among females with learning disabilities is discouraging. While it is true that parenting is a valued adult activity, early parenting is highly associated with other negative life circumstances and we recommend that further attention be given to this issue in order to decrease the early parenting rate of young women with learning disabilities.

Conclusion

These data provide the first long-term view of the post high school status of youth identified as learning disabled and their non disabled peers. Surprisingly, graduates identified as learning disabled, as a group, do not have significantly different employment rates as compared to their non disabled peers. Furthermore, males with learning disabilities are employed at rates that are highly competitive with that of their non disabled peers. There are, however, significant differences in the attendance of post-secondary training programs in favor of the non disabled graduates. Finally, the females with learning disabilities are under-employed and parenting at a high rate.

Do these data indicate that special education is broken and in need of major reform? We think not. Do these data indicate that special education as currently conceived is successful? We think not. These data cannot be used to answer those questions. Unfortunately, similar data have been used by some in the past to justify reform movements or new initiatives. The use of data such as these for those purposes is not justified. What we can conclude from these data is that graduates with learning disabilities are doing pretty well on the measure of employment when compared to graduates without learning disabilities throughout the first ten years following graduation from high school. Furthermore, the measures of engagement indicate that graduates with learning disabilities are doing less well than their non disabled peers but they are surely not doing poorly by comparison.

If these outcomes are good, bad, or neutral, they can hardly be attributed to the quality (or lack of quality) of the special education programs. To address that question, further studies need to collect data on high school drop outs and the specific content and quality of the high school programs attended by the youth (see: Shapiro & Lentz 1991). These procedures will undoubtedly need to incorporate qualitative as well as quantitative techniques. Techniques of this nature will be an expensive undertaking. Policy makers and researchers need to think carefully about the possible benefits from further studies of this nature and consider alternative methods to address the post-school status of graduates with disabilities and the effectiveness of special education programs.

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Table 1
Final Contact Rates for Graduates by Category and Gender

	Possible Contacts	Never Participated		Left the Study		Successfully Contacted	
Status	N	n	(%)	n	(%)	n	(%)
Cohort 2 (1990)							
Learning Disability	117	26	(22)	9	(8)	82	(70)
Female	31	11	(35)	2	(7)	18	(58)
Male	86	15	(18)	7	(8)	64	(74)
No Disability	261	80	(31)	20	(8)	161	(62)
Female	99	30	(30)	9	(9)	60	(61)
Male	162	50	(31)	11	(7)	101	(63)
Cohort 1 (1985)							
Learning Disability	172	76	(44)	12	(7)	84	(49)
Female	47	20	(43)	1	(2)	26	(55)
Male	125	56	(45)	11	(9)	58	(46)
No Disability	349	169	(48)	26	(7)	154	(45)
Female	140	74	(53)	7	(5)	59	(42)
Male	209	95	(45)	19	(9)	95	(45)

Table 2

Results of Chi-Square Analysis on Employment Rates by Category, Gender and Year

	Category Comparison	**Gender Comparisons**			
Year	LD vs. ND	LD F vs. ND F	LD M vs. ND M	LD F vs. LD M	ND F vs. ND M
Cohort 2 (1990)					
1	ns	ns	ns	ns	χ^2 =4.78*
2	ns	ns	χ^2 =5.41*	ns	χ^2 =7.3**
3	ns	ns	ns	ns	ns
4	ns	χ^2 =5.12*	ns	ns	χ^2 =4.91*
5	ns	χ^2 =20.66***	ns	χ^2 =14.24***	ns
Cohort 1 (1985)					
6	ns	ns	ns	χ^2 =4.82*	ns
7	ns	ns	ns	ns	ns
8	ns	ns	ns	χ^2 =5.92*	ns
9	ns	ns	ns	ns	ns
10	χ^2 =7.31*	χ^2 =5.94*	ns	χ^2 =7.76**	χ^2 =5.66*

Note. *$p < .05$. **$p < .01$. *** $p < .001$. ns = not significant. LD = learning disabled. ND = non-disabled. F = female. M = male.

Table 3

Results of Chi-Square Analysis on Engagement Rates (employed and/or in school or training) by Category, Gender and Year

	Category Comparison	**Gender Comparisons**			
Year	LD vs. ND	LD F vs. ND F	LD M vs. ND M	LD F vs. LD M	ND F vs. ND M
Cohort 2 (1990)					
1	$\chi^2 = 21.38$***	$\chi^2 = 9.75$**	$\chi^2 = 12.48$***	ns	ns
2	$\chi^2 = 10.06$**	$\chi^2 = 17.0$***	ns	ns	ns
3	$\chi^2 = 13.04$**	$\chi^2 = 6.96$**	$\chi^2 = 6.60$*	ns	ns
4	$\chi^2 = 20.86$***	$\chi^2 = 17.0$***	$\chi^2 = 8.64$**	ns	ns
5	$\chi^2 = 14.58$***	$\chi^2 = 17.78$***	$\chi^2 = 4.24$*	$\chi^2 = 9.13$**	ns
Cohort 1 (1985)					
6	$\chi^2 = 4.64$*	$\chi^2 = 10.79$**	ns	$\chi^2 = 7.21$**	ns
7	$\chi^2 = 4.62$*	ns	ns	ns	ns
8	ns	ns	ns	$\chi^2 = 8.10$**	ns
9	$\chi^2 = 7.62$**	$\chi^2 = 6.11$*	ns	ns	ns
10	$\chi^2 = 8.33$**	ns	$\chi^2 = 5.84$*	ns	$\chi^2 = 4.40$*

Note. *$p < .05$. ** $p < .01$. *** $p < .001$. ns = not significant. LD = learning disabled. ND = non-disabled. F = female. M = male.

Table 4

Number and Percentages of Mothers and Those Receiving Public Assistance by Category and Year.

	Total Females		**Mothering**				**Mothers Receiving Public Assistance**			
	LD F	**ND F**	**LD F**		**ND F**		**LD F**		**ND F**	
Year	n	n	n	(%)	n	(%)	n	(%)	n	(%)
Cohort 2 (1990)										
1	18	60	3	(17)	1	(2)	2	(66)	0	(0)
2	18	60	4	(22)	1	(2)	3	(75)	0	(0)
3	18	60	6	(33)	2	(3)	3	(50)	0	(0)
4	18	60	6	(33)	4	(7)	3	(50)	0	(0)
5	18	60	6	(33)	7	(12)	3	(50)	0	(0)
Cohort 1 (1985)										
6	26	58	14	(54)	7	(12)	5	(36)	2	(28)
7	26	59	14	(54)	8	(14)	3	(21)	1	(13)
8	26	59	14	(54)	9	(15)	5	(36)	1	(11)
9	26	59	15	(58)	12	(20)	6	(40)	1	(8)
10	26	59	15	(58)	15	(25)	5	(33)	2	(13)

Note. LD = learning disabled. ND = non-disabled. F = female.

Table 5

Results of Chi-Square Analysis on Engagement Rates (employed and/or in school or training and/or mothering) by Category, Gender and Year

	Category Comparison	Gender Comparisons		
Year	LD vs. ND	LD F vs. ND F	LD F vs. LD M	ND F vs. ND M
Cohort 2 (1990)				
1	χ^2 =17.29***	ns	ns	ns
2	χ^2 =4.68*	ns	ns	ns
3	χ^2 =8.36**	ns	ns	ns
4	χ^2 =15.30***	χ^2 =6.84**	ns	ns
5	χ^2 =11.09***	χ^2 =10.13**	ns	ns
Cohort 1 (1985)				
6	ns	ns	ns	ns
7	ns	ns	ns	ns
8	ns	ns	ns	ns
9	ns	ns	ns	ns
10	χ^2 =7.02**	ns	ns	ns

Note. *$p < .05$. **$p < .01$. ***$p < .001$. ns = not significant. LD = learning disabled. ND = non-disabled. F = female. M = male.

Figure 1

Employment Rates for Graduates Identified as Learning Disabled and Non Disabled

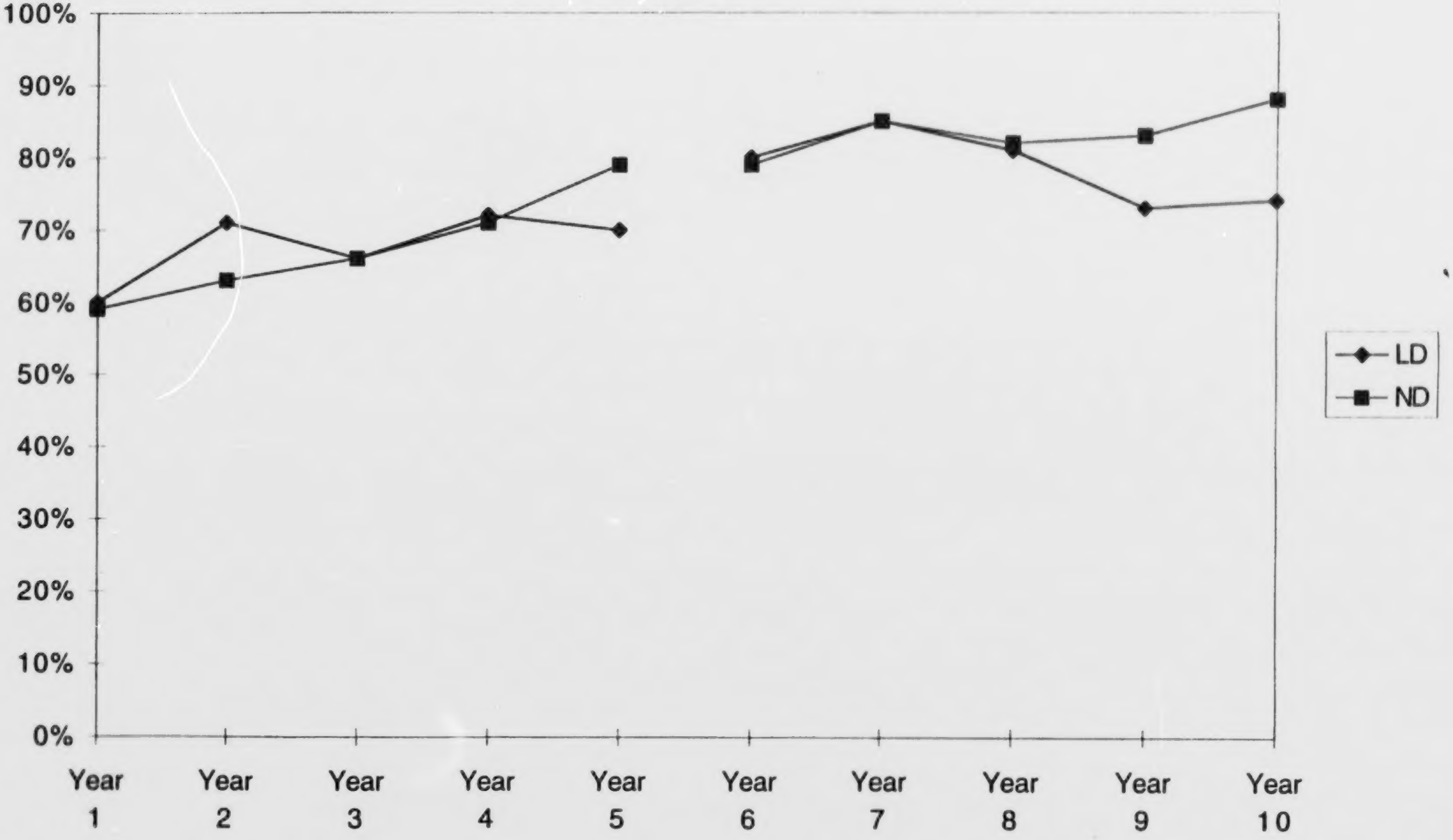


Figure 2

Employment Rates for Graduates Identified as Learning Disabled and Non Disabled by Gender

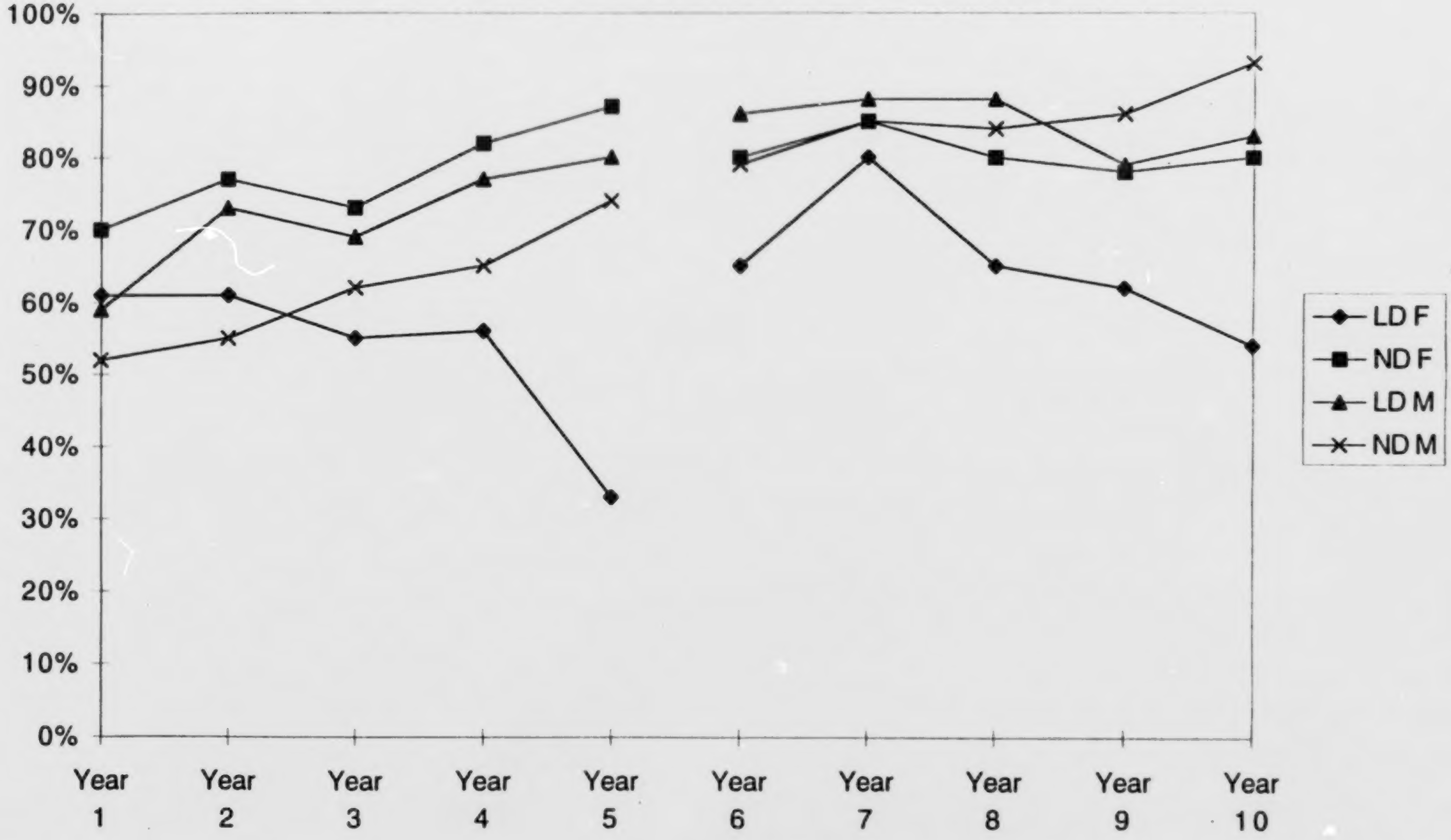


Figure 3

Engagement Rates (employed and/or in school or training) for Graduates Identified as Learning Disabled and Non Disabled

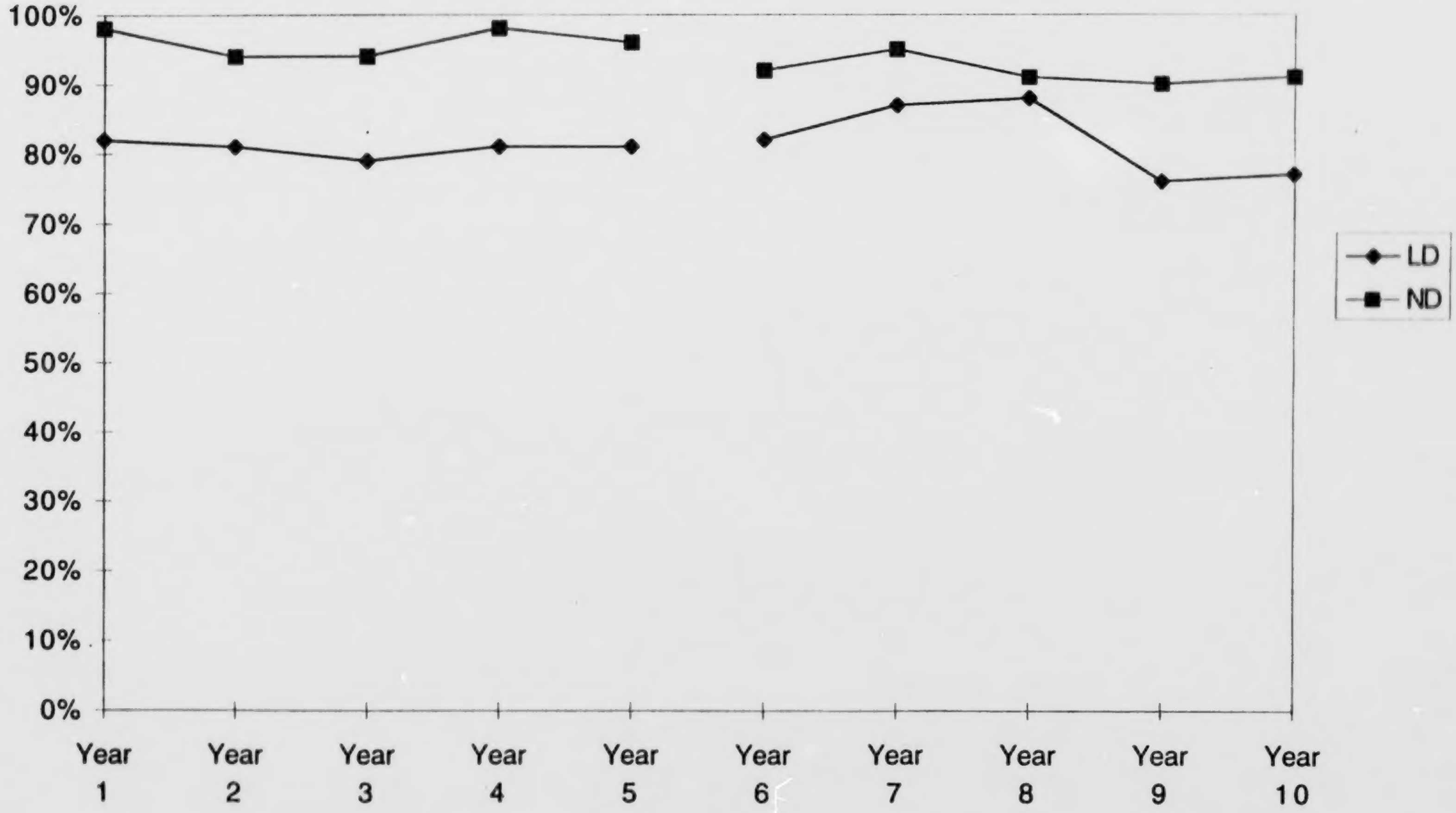
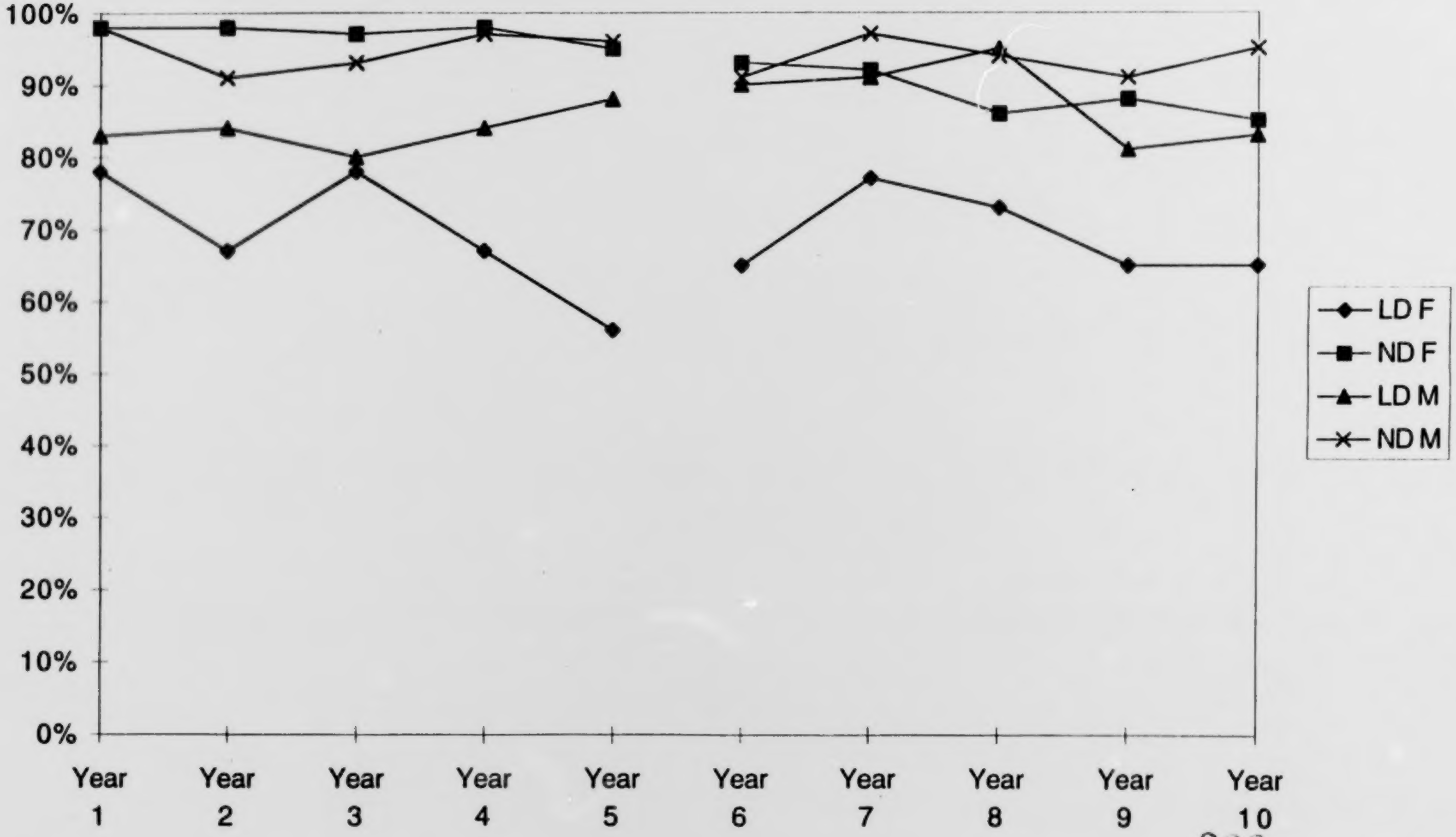


Figure 4



Engagement Rates (employed and/or in school or training) for Graduates Identified as Learning Disabled and Non Disabled by Gender

Figure 5

Engagement Rates (employed and/or in school or training and or mothering) for Graduates Identified as Learning Disabled and Non Disabled

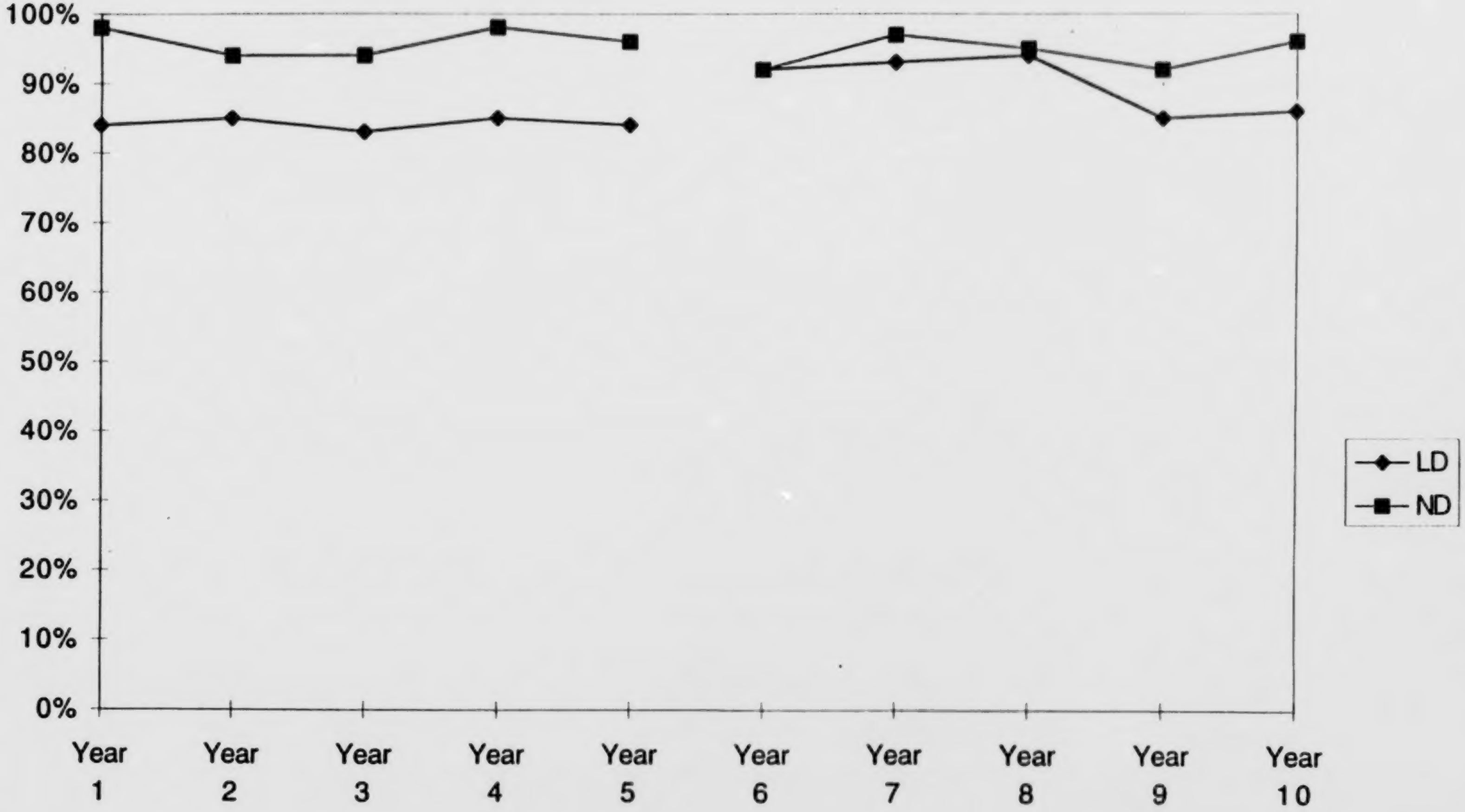
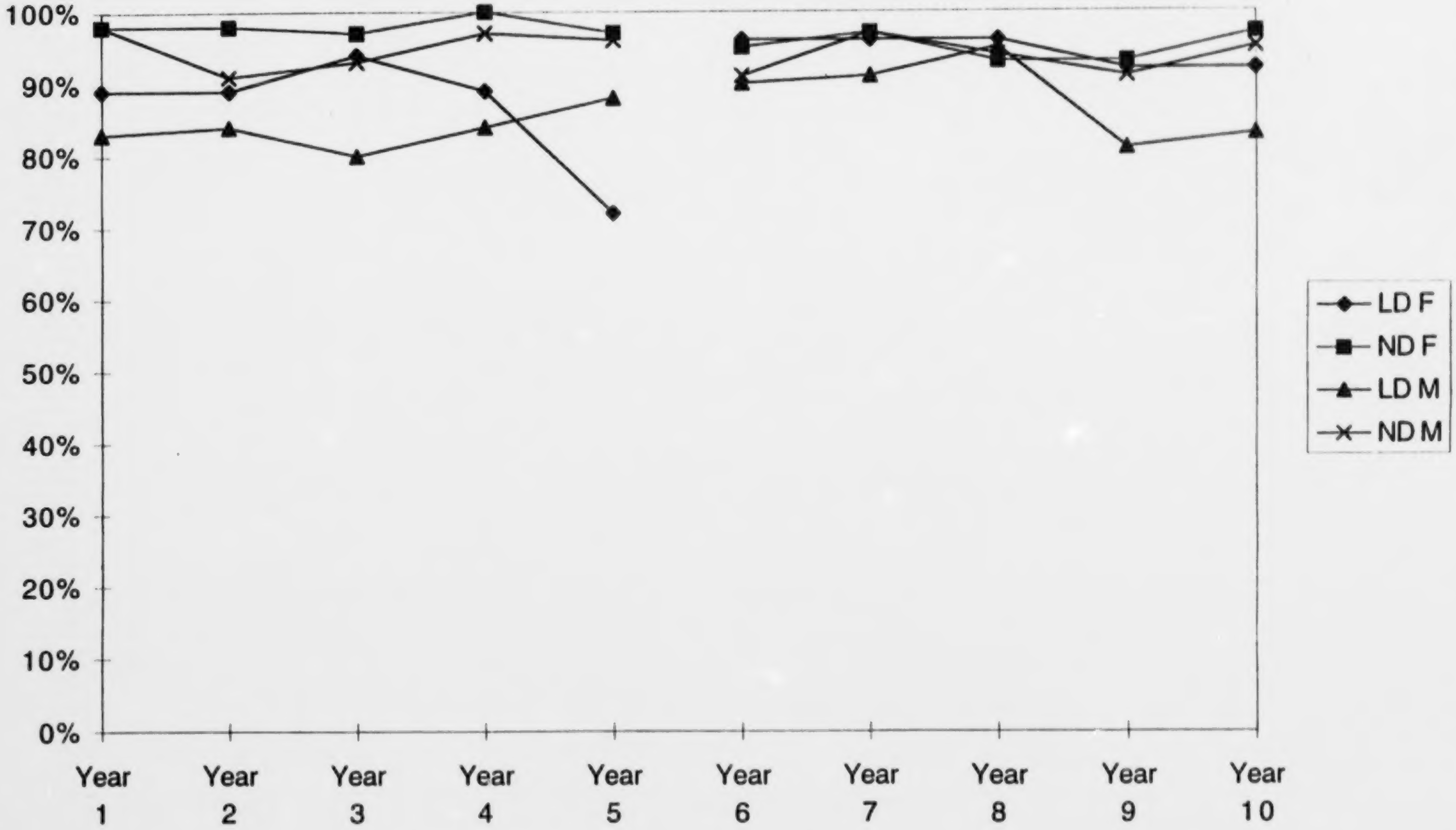


Figure 6

Engagement Rates (employed and/or in school or training and/or mothering) for Graduates Identified as Learning Disabled and Non Disabled by Gender



Appendix 9

Post-School Status of Youth with Behavior Disorders

Post-School Status of Youth with Behavior Disorders

Kimber Malmgren, Eugene Edgar, & Richard Neel

Abstract

This five year longitudinal study investigates post-high school outcomes for behaviorally disordered (BD) youth. Subjects include BD and non-disabled graduates from 3 high schools in western Washington. Two cohorts are tracked. One cohort consists of 1985 graduates and the other consists of 1990 graduates. Data were collected annually from 1990 to 1995, making one set of data reflective of a group of youth out of school 1 to 5 years, and the other reflecting outcomes for youth out 6 to 10 years. Outcomes for the BD youth are compared to outcomes for a random stratified sample of nondisabled peers.

Introduction

Despite the recent flood of follow-up studies of special education youth who have graduated from high school special education programs there have been few such studies which provide information on youth with behavior disorders (serious emotional disturbance). The purpose of this manuscript is to review the existing data base on the post school status of youth with behavior disorders, to add a current study to that data base, and to speculate on the type of research that might be conducted in the future to better understand this population.

Review of the Research Literature

Recent data from the U.S. Department of Education (1994) makes a strong case for studying youth with behavior disorders as a distinct population: behaviorally disordered students are being arrested while in school (22%), failing classes (65%), and dropping out (55%) at a rate greater than that for any other category of students with disabilities.

Studies that have specifically examined the post-high school life of students with behavior disorders have reported varying results which are hard to compare because of differences in samples, timing, and measurements. Most studies which track the transition of behaviorally disordered youth for more than one year out of high school, lump individuals who have been away from school for anywhere from two to five years (Neel, Meadows, Levine, & Edgar, 1988; Carson, Sitlington, & Frank, 1995), creating difficulties in making statements about differential progress during this time period. Given that children with behavior disorders make up only 8.7% of all children receiving Special Education services nationally (U.S. Dept. of Education, 1994) and the high drop out rate, it is not surprising that large cohorts of graduates with behavior disorders are difficult to track.

Of the more than 8,000 students included in the National Longitudinal Transition Study of Special Education Students (NLTS), 1,989 students were in school at the first interview (1985) and were out of school at the second interview (September, 1987). Of these, 256 (13%) were students whose primary category of disability was behaviorally disordered (BD).

Wagner's (1992) data indicate that only 40% of the BD youth examined in 1987 (4 mos. to 2 years after possible graduation from high school), had graduated from high school, while 56.3% had dropped out and 3.7% had aged out. Given the fact that more than half of BD students drop out of school during high school, Wagner et al's (1992) finding that only 3% go back to complete school or an equivalency program is alarming. (The statistic for youth with all disabilities is 27% reenrollment in high school or equivalency programs for dropouts three to five years out of high school, and 54% for regular education dropouts in the same time period.) Wagner et al. found that three to five years out of high school, 49.9% of the behaviorally disordered youth in the NLTS still did not have a diploma or equivalency certificate, compared to only 17% of youth in the general education population.

Attendance at postsecondary schools was reported to be low for behaviorally disordered students (Marder, 1992). Looking only at high school graduates who had been out of school three to five years, the rate of postsecondary school attendance was 32.5% for BD students, compared to 78% for the general population. Degree attainment during this period (three to five years post-high school) was achieved by 10.6% of BD students, compared to 18% of general education students (Sebring, Campbell, Glusber, Spencer, & Singleton, 1987). Of those BD students who earned a degree, approximately 90% earned them from vocational schools, 10% from two year colleges, and none from four year colleges.

Compared to other categories of disabilities, Wagner et al., (1992) found that individuals with behavior disorders were fairly successful at finding jobs by the first interview conducted in 1987. However, the status and pay rate of their jobs did not rise significantly by the 1990 interview, and they were plagued with greater job instability than other populations. Specifically, at the

1987 interview (<2 years post-high school), 40.7% of the BD students were employed, compared to 59.1% of the general education students. At the 1990 interview (3-5 years post-high school), 47.4% of the BD students were employed versus 69.4% of their general education counterparts. BD graduates were employed at a 61% rate compared to 39.5% for the BD dropouts.

At the time of the 1987 interview, 71.5% of BD youth were reported to be earning $4.30 or less per hour, while 9.1% were reported to earn in excess of $6.00 per hour. By the second interview, in 1990, 23.9% were reported to earn $4.30 or less per hour, while 48.7% were now reportedly earning more than $6.00 per hour. The percentage of BD students employed in full-time positions was lower than the percentage of general education students at both interviews, but did increase significantly ($p < .01$) by the second interview. At the first interview (<2 years post-high school), 14.5% of BD youth were reported to be employed full-time, compared with 30% of general education youth. By the second interview (3-5 years post-high school), 35.0% of BD youth were employed full-time, compared to 46% of their general education counterparts (D'Amico & Blackorby, 1992).

Another study addressing transition issues of youth with behavioral disorders was done by Neel, Meadows, Levine, and Edgar (1988). This study examined outcomes for 160 behaviorally disordered high school graduates in Washington state. The cohort was made up of students who had graduated between 1978 and 1986, making them anywhere from one to nine years out of school at the time of data collection. Neel et al.'s sample was similar to the NLTS sample in gender breakdown, with 79% males (n = 126). Outcomes for these BD graduates were compared to a non-disabled cohort (n = 542) of randomly selected students who had been enrolled in a vocational track in high school and had graduated in the same years as the BD cohort.

Neel et al. (1988) reported that only 17% of BD respondents were enrolled in some type of postsecondary school program at the time of data collection, compared to 47% of the non-disabled respondents. At the time of Neel et al.'s interview, 60% of BD graduates were employed, as were 73% of the non-disabled graduates. These percentages are higher than those reported in the What Happens Next? study, most likely because the Neel et al. sample contained students who had been out of school up to nine years, where Wagner et al. examined students who had been out of school five years at the most.

Carson, Sitlington and Frank (1995) recently reported results on the behaviorally disordered sub-population of the Iowa Statewide Follow-up Study, which is a 5-year project designed to study a random population of special education students. The Iowa study includes both graduates and drop-outs. At the time of Carson, et al.'s report, data had been collected at Year 1 (when the graduates were one year out of high school) and at Year 3 (when the graduates were three years out of high school). Drop-outs were included with the peers with whom they would have graduated had they continued in school. Therefore, at the Year 1 interview, drop-outs could have been out of school anywhere from just over one year up to five years. Likewise, at the time of the Year 3 interview, drop-outs could have been out school from just over three years up to seven years.

The Iowa sample consisted of 57 BD graduates and 25 BD dropouts. Male students made up 67% of the graduates and 84% of the drop-outs. At

Year 1, 40% of BD graduates and 50% of BD drop-outs were attending some type of postsecondary education or training. At the Year 3 interview numbers increased to 49% for BD graduates and 60% for BD drop-outs. These percentages are notably higher than Neel et al.'s (1988) reported 17% postsecondary school attendance (graduates one to nine years out), and Wagner et al.'s (1992) 32.5% (graduates three to five years out).

Carson et al.'s (1995) employment data reflects that 55% of BD graduates and 36% of BD drop-outs were employed at Year 1, increasing to 68% of BD graduates and 60% of BD drop-outs at Year 3. Neel et al. (1988) reported a 60% employment rate for BD graduates (one to nine years out). Wagner et al. (1992) reported that 40.7% of BD students (graduates and drop-outs) were employed at the first interview (<2 years out of high school), and 47.4% were employed at the second interview (three to five years out). Of those employed, 61% of Carson et al.'s graduates and 75% of the drop-outs were employed full-time at the Year 1 interview. At the Year 3 interview, the graduates' full-time status dropped to 59%, while the drop-outs' rose to 93%. These Year 3 statistics were reported to be statistically significant using chi-square analyses. Wagner et al.'s data for full-time work status of BD students reflects a much smaller percentage in the full-time work force: 14.5% at <2 years out and 35.0% at three to five years out. Carson et al. also reported that drop-outs made significantly more per hour (based on mean wages) than their graduate counterparts at the Year 1 interview. Drop-outs were reported to earn $5.38 per hour while graduates earned $3.69 per hour. At the Year 3 interview, drop-outs were reported to earn $5.93 per hour, graduates $4.27. (This difference was not statistically significant, however.)

The data summarized above, from one national and two state-wide studies, reflects the best evidence available to date on the transition of behaviorally disordered youth from school to life in the community.

Current Study

The primary research questions for this study addresses the differences in the post school outcomes for high school graduates labeled behaviorally disordered as compared to their peers without disabilities.

Method

This data set is part of a larger study entitled The First Decade Project which has been discussed elsewhere (Levine & Edgar, 1994; 1995). The data set consists of two cohorts of graduates (1985 and 1990) from three high schools in northwest Washington. Included in the overall study are all of the special education graduates from these three school districts for the two cohort years, and an equal number of randomly selected non-disabled graduates. In the Fall of 1990 letters from the special education directors of the three school districts were sent to all the parents of the graduates requesting their participation in the study and requesting their informed consent. For those parents who did not respond to the initial letter a follow-up telephone call was made requesting their participation. Informed consent was obtained for all the parents and graduates who participated in the study. The study reported in this article only addresses the non-disabled graduates (Original N=610) and the graduates labeled Seriously Behaviorally Disordered (BD) (Original N= 28).

The data for this study were collected over a five year period (1990-1995) using telephone interviews with the parents of the graduates. The interviews were incorporated into a computer assisted program that allowed the interviewer to enter the data directly into the database. Reliability checks were conducted each year during which time a supervisor coded an interview concurrently with an interviewer and an agreement analysis was conducted for each so coded interview. There were a minimum of four such checks for each interviewer each year of the study. The agreement percentages for these interviews ranged from 91% to 100% with a median agreement of 97% for 100 reliability checks. The information requested in the interviews focused primarily on the post school status of the graduates: current employment, hours worked, wages, benefits, post-secondary education program attendance and graduation from such programs, degrees earned, marital status, number of children, current living situation. In an earlier study (Levine & Edgar, 1993), we determined high rates of agreement between the self report of the graduate and the report of other informants on the following variables: employment, post-secondary education program attendance, marital status, parenting, and place of residence. Low agreement was found for: hours worked, salary, and benefits (the primary reason for this low agreement was that the other informants did not know the correct response).

Missing subjects plagues all longitudinal studies. There are two primary sources of missing subjects: those who were eligible for participation but who never were part of the study because they refused to participate or they could not be located, and those who participated in part of the study and then dropped out because they chose not to participate or they moved and could not be located. In this study our final contact rate was 71% (20) for the

BD graduates and 52% (315) for the non-disabled graduates. For the BD group, 7 of the 8 missing subjects (88%) never participated in the study and 1 (12%) dropped out of the study after participating for several years. For the non-disabled group, 249 (84%) of the 295 missing subjects never participated in the study while 46 (16%) left the study during the duration of the study (See Table 1).

We analyzed the contact data in order to determine if there were significant differences between the subjects in the final contact group and those who never were part of the study and those who dropped out of the study. We were unable to note any differences as to gender, ethnicity, or school district between those who remained in the study and those who left the study and/or never participated in the study.

Results

Data on the employment rates for BD and non-disabled graduates are presented in Table 2. For the 1990 cohort, represented in Years 1 - 5, statistical comparisons (chi squares) yielded no significant differences. The 1985 graduates, represented in Years 6 - 10, were analyzed similarly. In Years 6 and 10 the BD graduates were employed at significantly lower rates than the non-disabled graduates. Annualized earnings are reported in Table 3. When considering only those graduates who were employed, no significant differences between BD and the non-disabled graduates' earnings were reported.

It is not until rates of engagement were analyzed that differences of any magnitude were uncovered. Rates of engagement were calculated by determining the percentage of subjects in each cohort who were either employed or enrolled in post-secondary education at the time of each interview. For female subjects, parenting was also considered an "engaged" activity. Data on rates of engagement of BD and non-disabled graduates are presented in Table 4. Significant differences were found at ~~eight~~ seven of the ten data collection points. Rates of post-secondary degree completion (which included any type of degree or certificate) for the graduates were analyzed at Years 5 and 10. At the Year 5 interview, 23.1% of the BD graduates (n = 13) had completed some type of post-secondary degree program, while 44.7% of the non-disabled graduates (n = 161) had done so. At Year 10, 28.6% of the BD graduates (n = 7) had received some type of post-secondary degree or certificate, while 66.9% of the non-disabled cohort (n = 154) had done likewise. Chi-square analyses were completed using Yate's correction. Significance at the $p < .01$ level was reported at both comparison years.

We would like to note that none of the four female BD graduates (three in the 1990 cohort and one in the 1985 cohort) received any type of post-secondary degree or certificate during the course of this study. However, at Year 5, 51.7% of the non-disabled females (n = 60) had received some type of post-secondary degree or certificate, and at Year 10, 78.0% (n = 59) had done so.

Conclusions

The results from this study suggest that graduates categorized as behaviorally disordered are employed at rates similar to that of their non-disabled peers up to ten years post-graduation. Because of the small sample sizes in the behaviorally disordered subset the significant difference at years 6 and 10 could be negated by the presence of one more employed graduate.

Another effect of the low sample size was our ability to individually scrutinize the personal data collected for the behaviorally disordered subsets. Because of this scrutiny, we know that one of the male graduates in the 1985 cohort was the full-time caretaker for his two children while his spouse worked full-time. This knowledge reinforces the importance placed on the framing of questions to properly capture subjects' participation in various adult activities.

For those graduates who were employed, we do not find significant differences in earnings, which complements our finding of little significance in employment rates. Combined, these findings suggest that adult outcomes in terms of employment, for BD graduates cannot be considered wholly negative.

Engagement rates, however, suggest something different. Adding post-secondary school attendance to employment to form an engagement variable produced a number of significant points. Apparently, BD graduates are not attending post-secondary education programs at rates comparable to their non-disabled peers. When looking at the trends for these two groups: engagement rates for non-disabled graduates start out high (98.1%) and remain high, while employment rates climb. This suggests that non-disabled graduates enter the work force as they leave school. For the BD graduates, employment rates look essentially flat, while engagement rates for this group decline over time until they eventually mirror employment rates. As BD graduates leave post-secondary school, employment rates for this population are not boosted.

Rates of degree completion are also significantly lower for the BD graduates and do not appear to increase after the five year mark, as do the rates of degree completion for the non-disabled cohort. Simply graduating from high school does not appear to make these two groups equal in terms of earning post-secondary degrees.

Discussion

Without knowledge of the types of secondary school programs these youngsters attended, it is impossible to determine whether or not any of the differences noted above are attributable to any certain type of transition programming. Before differences in outcomes can have specific implications for transition programming, research must be done that follows BD students from some point in time prior to graduation.

Another important issue not addressed by this study is the progress of drop-outs. Given that Wagner et al. (1992) reported a drop-out rate of 56.3% for behaviorally disordered students, it is easy to assume that our educational system is failing this group of youth. More data on outcomes for BD drop-outs is needed to establish whether or not this is truly the case. Including drop-outs in follow-along or follow-up studies makes research initiated prior to graduation even more appealing.

Low incidence groups -- in this case, high school graduates categorized as behaviorally disordered -- are difficult to track longitudinally. In this study we would have expected 20 - 26 BD graduates in the 1990 cohort, given a total special education graduate population of 261 and an estimated incidence rate of 8 - 10%. In the 1985 cohort we would have expected 27 - 35 BD graduates, given a total special education graduate population in that year of 349 and the same incidence rate. In reality, the BD subsets (before subject attrition) were comprised of 15 BD graduates in the 1990 cohort and 13 in the 1985 cohort. Given an estimated drop-out rate of 55% for this population, the low numbers are understandable.

Because of the low numbers of BD subjects in this study, our results must be considered suggestive at best. Our findings, however, are comparable to the recent findings of other researchers as described in the review of literature. It may be prudent for researchers interested in this population to investigate other ways of tracking behaviorally disordered students -- graduates or otherwise.

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Table 1

Final Contact Rates for Graduates by Disability and Gender

Cohort 1 - 1985 Graduates	Total Possible Contacts (N)	Successfully Contacted all Five Years (n)	Rate of Contact (%)
Behavior Disordered	13	7	53.8
Male	11	6	54.5
Female	2	1	50.0
Non-disabled	349	154	44.1
Male	209	95	45.4
Female	140	59	42.1
Cohort 2 - 1990 Graduates			
Behavior Disordered	15	13	86.6
Male	12	10	83.3
Female	3	3	100.0
Non-disabled	261	161	61.6
Male	162	103	63.5
Female	99	60	60.6

Table 2

Employment rates for BD and non-disabled graduates by category and year

Year	BD (n=13)	ND (n=161)	Statistical Significance
1	53.8	62.9	ns
2	46.2	63.4	ns
3	46.2	66.5	ns
4	53.8	53.8	ns
5	61.5	78.9	ns
	(n = 7)	(n = 154)	
6	42.9	80.3	*
7	71.4	85.1	ns
8	71.4	82.5	ns
9	57.1	83.1	ns
10	42.9	87.7	**

Note: All comparisons were analyzed using a one-tail Fisher's Exact Test. *p < .05. **p > .01.

Table 3

Mean annualized earnings for graduates who were employed at the time of contact

Year	BD (n)	ND (n)
1	$12,734 (5)	$ 8,576 (76)
2	16,172 (4)	9,213 (76)
3	10,562 (6)	10,653 (89)
4	11,873 (6)	13,801 (86)
5	14,071 (7)	17,539 (95)
6	24,419 (2)	20,056 (74)
7	18,954 (4)	22,812 (74)
8	24,927 (4)	25,614 (91)
9	32,086 (4)	29,019 (79)
10	32,500 (2)	29,896 (82)

Note: Figures represented in dollars per year. Graduates who were not employed at the time of contact and those for whom no income data were collected were not included in the calculations of annualized earnings for that year. One way analysis of variance was used for earnings comparisons.

Table 4

Rates of engagement for graduates by category and year

Year	BD (n=13)	ND (n=161)	Statistical Significance
1	84.6	98.1	**
2	84.6	93.8	ns
3	69.2	94.4	**
4	69.2	98.1	**
5	69.2	96.3	**
	(n = 7)	(n = 154)	
6	57.1	92.2	*
7	71.4	96.8	*
8	71.4	93.5	ns
9	71.4	91.6	ns
10	57.1	95.5	**

Note: Numbers are percentages. All comparisons were analyzed using a one-tail Fisher's Exact Test. *p < .05. **p > .01.

Appendix 10

The First Decade After Graduation: Anecdotal Accounts of Locating and Retaining a Longitudinal Follow-up Sample

The First Decade After Graduation: Anecdotal Accounts of Locating and Retaining a Longitudinal Follow-up Sample

Stephanie Prince
Research Supervisor
Experimental Education Unit
University of Washington
Seattle, Washington

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Abstract

This article provides narrative accounts on the tracking of a sample of 1,098 subjects in a longitudinal study of the quality of life of high school graduates in three school districts in Washington state. The effort in locating and retaining a large target population is not often discussed in the literature, and yet it is an important facet of longitudinal research. High family mobility, a problem found especially in inner cities, is a major challenge. This study focused on two cohorts of 1985 and 1990 graduates. The special problems encountered in finding the subjects in the 1985 cohort, and recommended strategies for successful data collection for both cohorts are described.

This article was inspired by my work as the research data collection supervisor for a 5-year federally funded project entitled "The First Decade After Graduation." The project had two components: 1) a quantitative study and 2) the completion of 26 qualitative case studies. My primary responsibility involved the data collection for the quantitative component.

One characteristic of United States culture is that it is a very mobile society. It would be safe to say that economic forces are a major element that drives this high rate of mobility. I know individuals as well as whole families who moved two or three times within one year, sometimes not by choice, but by necessity. This phenomenon of mobility creates an interesting and challenging dilemma for researchers who conduct follow-up and follow-along studies. Two issues were of concern for our study. First, how could we locate subjects for whom we had old (5 years old) addresses and telephone numbers; and second, when we found people, how could we maintain our sample over time? Ramey (1982) once said that attrition is the "bane of longitudinal studies." In addition, our need to begin our study with subjects whose addresses and phone numbers were 5 years old posed, I believe, an even greater challenge than when studies screen/recruit participants for their research from currently operating programs. As Streissguth and Glunta (1992) have noted, "careful attention to recruitment and retention sets the stage for successful longitudinal prospective research" (p. 138). They employed a screening device to optimize selection of their follow-up cohort, something we could not do. Studies conducted by Gregory, Lohr, and Gilchrist (1992) and Gwadz and Rotheram-Borus (12992) also began with actual bodies.

Research that is funded with a line item for payments to subjects often is limited in the number of subjects, because of the expense. Follow-up studies often track hundreds, if not thousands, of individuals and families. Thus it is difficult--that is, simply too expensive--to offer incentives to so many participants. In the qualitative portion of the "First Decade After Graduation" study, 26 subjects were paid a $100.00 honorarium for completing a set of 3 in-depth face-to-face interviews. In the Gregory, Lohr, and Gilchrist (1992) study, 241 respondents were paid for each interview they completed over a 2-year period "to increase the response rate...when interest in the study could wane..." (p. 74). Generally speaking, researchers are placed in a position in which they have to explain the positive outcomes of such studies to make it appealing for people to remain involved. They essentially depend on an individual's sense of belonging to a community and his or her participation in its betterment directly as well as indirectly.

The purpose of the "First Decade After Graduation" study was to look at what 1985 and 1990 graduates of high school were doing over the 5-year period of the grant period. For the 1985 graduates the start-up of our project in Year 1 was 5 years since they had graduated and thus would extend to 10 years after graduation. For the 1990 cohort, we wanted to follow them for the 5 years directly following graduation. The researchers wanted to examine the quality of life of graduates in order to determine what new and innovative programs could be put in place in the high school to help graduates have a better quality of life and make a positive transition into the adult world of employment, postsecondary education, and social activities.

The data were collected once a year during a computer-assisted telephone interview with the person most familiar with the graduate's situation. We also interviewed the graduates themselves in the first and second years of the project (for a side study of respondent agreement). However, when a parent, guardian, or other respondent refused to be interviewed or could not be reached, we attempted to interview the graduate as "respondent." The databases for these sets of respondents were kept distinct.

The protocol asked about key post-high school experiences including further education and training, employment, residence, marital status, and whether the graduate had children. At the start of Year 1 in January 1991, the sample included the names of 632 graduates from the 1985 graduation class and 466 graduates from the 1990 graduation class of three school districts. We mailed letters of consent to the parents. Nineteen percent (118) of letters to the 1985 subjects' parents and 3% (14) of letters to the 1990 subjects' parents were returned to us as undelivered with no forwarding address. See Table 1 for a detailed breakdown of the status of consent letters. For those subjects whom we were able to reach but from whom a written response had not been received, we requested consent at the time of the first interview.

[Insert Table 1 here]

Our contact rate in Year 1 for the 1985 cohort across all three districts was 351, 56% of our original N; the contact rate in year 1 for the 1990 cohort across all three districts was 344, 74% of our original N. See Table 2 for a complete analysis of our ability to contact our respondents on a year-to-year basis.

[Insert Table 2 here]

The first year of the project posed the most challenge in locating our subjects, especially those from the 1985 graduation class. See Table 3 for the status of Year 1 subjects who were difficult to reach because of disconnected and wrong phone numbers. We were working with the graduation class lists with graduates' addresses and phone numbers as of 1985 and 1990 from the respective school districts. Thus we employed a number of strategies to maximize our efforts in locating subjects. Methods included contacting Directory Assistance services and making extensive telephone book searches. We also consulted cross-reference directories such as the Polk Directory (1990) and the Cole Directory (1990). We placed calls to same-name people to see if any of them possibly could be relatives of our sample members. For example, we found a paternal uncle of one graduate. He had no information regarding the graduate or the graduate's mother because his brother had divorced her. But he did give us the number of his sister, who he believed knew of the mother's current situation. The ex-sister-in-law was willing to give us the mother's new name and phone number. In another case of a disconnected number, we found a graduate's aunt, who referred us to the graduate's grandmother, who referred us to the graduate's mother. In the case of very common names (such as Smith or Scott) where there were more than ten possibilities, it was not feasible for us to search that way. In a more radical approach, two data collectors visited a graduate's address provided by the school district. They spoke with neighbors and telephoned other graduates or friends of the subject who might know the subject's whereabouts. They visited the school that the graduate had attended. This latter strategy, however, resulted in our finding only 5 of our subjects (Year 1), two 1985 graduates and three 1990 graduates.

From our experience in realizing how difficult it was to locate people, we modified our interview. At the end of each interview we requested from the respondent the name and phone number of someone (i.e., "a contact") who would "always know where you are in case you move or change your phone number." This proved to be a very useful and successful strategy. For example, in Year 2, we encountered 45 disconnected and wrong phone numbers. We were successful in locating 26 of these subjects, 17 (65%) of whom were found when we called the "contact" person and requested the subject's new telephone number. See Tables 4, 5, 6, and 7 which delineate the status of disconnected and wrong numbers we encountered in Years 2, 3, 4, and 5 respectively, and the manner in which we derived current telephone numbers.

[Insert Tables 4, 5, 6, & 7 here]

Accounts concerning our search for subjects who were no longer at the same address or phone number where they had been a few years before, a month before, or even "just a few days ago" are the focus of this essay. For example, we contacted a respondent in North Carolina who asked us to call back to do an interview at another time; when we did so a few days later, the respondent had moved! What follows are a few anecdotes that gave a sense of hope and encouragement to our project's researchers in their never-ending struggle to keep the sample intact, and to our data collectors, who served the project as "searchers" as well as interviewers.

Situation 1: We had received a written consent to participate from SF, a graduate's mother, but after nine attempts to contact her we were told the number was wrong. We then wrote to her, but our letter was returned as undelivered. SF had written a note on her original consent letter to say that she and her son both attended a community college. We called the community college and found that neither was enrolled, but that the graduate had worked part-time in the machine shop up until recently. We explained our study to the person we were speaking with, and he agreed to give us a telephone number for SF. It should be noted that we placed five calls to the community college before reaching someone who agreed to give us a number, and then three more calls to that number resulted in an interview.

Situation 2: The graduate had lived with a foster mother in 1985. We interviewed her, but the interview was missing substantial information. She did not know the whereabouts of the graduate, whom we did want to try to contact. The graduate's name was not listed in the phone book, but there were a few people with the same last name. We called LT. She was in fact the graduate's paternal grandmother. Although she too did not know the graduate's address or phone number, she gave us the father's phone number. However, when we called the father's number, the person who answered said that the father was in the hospital, and suggested that we call back in 3 weeks. We called back in 3 weeks and spoke with the father. We explained our study and why we were looking for his son. He gave us his number, and we were able to reach and conduct an interview with the graduate.

Situation 3: We interviewed the father of a graduate, but the number he gave us for his son was a disconnected number. We called the father back at his home, but then his number was disconnected! We called twice and left messages at his work number.

No response for several days. Then one day when we called, he was at work and talked with us. He said we should use his work number next year, and said he would call us back with his son's new number. After 3 days, we received the new phone number for the graduate.

Situation 4: The phone number we had for a graduate's parent turned out to be the number of one of the graduate's siblings. But it took 16 calls before we were able to speak with someone at the number in order to find out that it was for the wrong person. A friend of the sibling gave us the parent's phone number and it took another six calls before we were able to conduct an interview.

Situation 5: The name of the graduate was WH. The "parent" name (as given to us by the school district actually was a former stepfather) was TB. His phone number was disconnected. There were no TBs in the telephone book or listed through Directory Assistance. The data collector looked up the last name of the graduate in the telephone book . There were several. We called all of the numbers several times. At last one of the people we called said something to this effect: "He doesn't have anything to do with us. No, we don't know him." The data collector felt that this strange response indicated that the woman knew something and continued talking about who we were and why we wanted to talk with a parent or guardian of WH, and to WH. Finally, it turned out that the woman was the mother of a man who had been married to WH's mother, but who wasn't WH's father, although the boy had taken his name. Meanwhile, this woman knew the mother's maiden name, but that was not listed in the phone book. She told the data collector that she would see if her husband knew anything and that we should call her back the next day. We called back and she said she was sorry but she had no new information, except that she thought that the mother worked for Polly's Cookie Company (a pseudonym); she said she thought she had seen the graduate's mother driving a Polly's Cookie Company truck in the neighborhood recently. The data collector called Polly's Cookie Company. They did not know a CW (mother's maiden name), but they did employ a CB. (This was the same last name that was on our contact sheet, although she was no longer married to TB either.) CB wasn't there then, but we were told that if we called back at such and such a time, maybe we could reach her. We called back and spoke with her briefly; she gave us her home number and told us to call her back at home in the evening. We did indeed phone her at home and conduct an interview. It would be fair to say that it took us approximately 45 phone calls to reach her. In this case, it was difficult to keep an exact record of attempts to find the interviewee and conduct the interview. Needless to say, the data collector was pleased that this search did not result in a refusal to be interviewed!

Situation 6: We called the parent's number, but only the graduate was living at the home. The mother was living in Alaska and the graduate informed us that she was not the appropriate parent to talk with. But the father, who was the appropriate parent/respondent, lived on a houseboat and, according to the graduate, "without a phone." The graduate told us that he spoke with his father every month or so. However, he offered to get us a work number for his father. The graduate appeared not to want to give out information, but at the same time he did complete an interview with us. We called him back 10 days later, and asked where his father worked. This time he was willing to tell us, and we called the father at work to conduct the interview.

Situation 7: The graduate's mother's number was disconnected and there was no Directory Assistance listing for her. The data collector called the "contact," the mother's mother-in-law, but learned that the mother had divorced this woman's son during the past year. The former mother-in-law said she knew nothing about the graduate or his mother. (The woman's son had been the mother's second or third husband and the graduate was not his child.) But then the "contact" called us back and said that the graduate's sister worked at Bend's Department Store. We called the store and spoke with the sister, who gave us her mother's new number.

Situation 8: The mother's phone number was disconnected. The "contact" person refused to give us the mother's new number because of recent harassment calls to her; further, she was out of town. The graduate had no phone. In this situation the "contact" person was the aunt and she was familiar with the graduate, so the caller asked if she would be willing to become our respondent for the next 3 years and she agreed. It took nine calls to reach an appropriate interviewee.

Situation 9: The phone number we had for one of our subject's families who lived in SE Washington was now the number for a business firm and not the subject's home phone. The data collector asked the person she was speaking with to look up the mother's name in the local telephone book to see if a new number was listed. This person was cooperative and did find a listing. When we called, we reached a family member (a stepfather) who requested that we call back at another time and speak with JW's mother. After two more attempts, we reached her and conducted the interview.

Situation 10: A "contact" person said that the current address of the graduate's mother was correct. We sent a letter because calling the phone number did not work, but we received no answer to our letter. The "contact" did not know about the graduate. However, looking back at his interview from Year 2, we found that he had been at the CJR Center (a pseudonym). We called there. The person answering our call could not give us any information because of confidentiality concerns, but said she had seen him "walking down the road a week or so ago" and that he was in the area--we could send his letter to the CJR Center, and they would forward it to him. We did this, but never received a response from the graduate. The data collector suspected she had found the subject, but that, in essence, we had a received a refusal through silence. However, for coding purposes, since we had not received either a written or verbal refusal to be interviewed, we did record this subject as "not found." Although we were not successful in speaking to either the parent or the graduate in this case, I chose to include this anecdote as an example of how we did actively pursue a number of avenues in our attempt to find our family informants/respondents.

Situation 11: In this situation we had the telephone number for our informant, the foster mother of our subject. She was reached, but she told us that she had not heard from the subject for the past year. She felt that she could not respond to the interview questions; she simply did not have knowledge of the circumstances of his life over the past year. She gave us an address for the subject, but she alerted us that it might not be current. She also said she would write to him about the study. We also sent a letter, but never received a written reply. During another call that we made to the foster mother she said she would call us if she heard from him. The project data collection period was nearing a close, and we were prepared to classify this situation as "unable to do an interview." A month later, the foster mother called us and gave us a telephone number for the graduate who was now residing and working in another state. We opened our files, called the graduate, and conducted the interview. The success of reaching an informant in this situation was solely dependent on the exemplary cooperation of the foster mother.

Situation 12: Our respondent in Year 4 was the graduate. When we called him in Year 5, he was no longer at the number we had for him. We got his new number, but when we called him, he said he was "too busy" to talk to us. His foster mother had been our respondent in previous years, but this year, she still did not know the circumstances of the graduate, and chose not to call him. The caller decided to give it another try at the graduate's current number. The number we had turned out to be the number for the graduate's father's partner. She was very familiar with the graduate and agreed to be interviewed. Seven calls (involving four people and two states) had been made in order to obtain a completed interview.

Situation 13: During Year 4 of the study, 92% (see Table 5) of informants who had disconnected or wrong numbers were found by way of a person whose phone number the informant had given us in a previous year. In two of those cases, it should be noted that the "contact" person actually referred us to another "contact" person who had current knowledge of the whereabouts of our family informant. Thus four "layers" of making telephone calls took place before we reached the person we needed to interview.

Situation 14: The phone numbers for our respondent and contact person were both wrong numbers. We consulted the Directory Assistance service and were given the phone number of the graduate's stepmother. The stepmother gave us the number for the graduate's mother. It took 10 telephone calls before this interview was obtained with our respondent (the mother).

Situation 15: Our respondent in the first 4 years was MT, the grandmother of the graduate. In Year 5 we made six attempts to contact her at different times of the day and evening without success. The interviewer decided to call AP, the contact person, to find out about our respondent. After two attempts we reached AP, who told us that MT was in a nursing home in a different city. She did not have the name or phone number of the nursing home, but told the caller that it was in a "nice wooded area." The data collector then began calling nursing homes in the particular city. On the fifth try, she decided to ask the person she was talking to if she knew of a particular home that was referred to as "the one in the nice wooded area." The person suggested one and the caller found MT there. However, the caregiver at the nursing home explained that MT was "not up to it and unable to come to the phone." The graduate in this situation did not have a telephone, and there were no other eligible family informants available. Although we were not successful in obtaining an interview, we had found our respondent after 14 calls.

Situation 16: We called the graduate who was our respondent at her mother's home number. Her mother informed us of her new number. We made three attempts to call her, and each time were told by her fiance that she would be home later or was in the shower. Then during our fourth attempt, the fiance said that Joann (pseudonym) would rather not be bothered, but that he would talk to us if the caller would tell him "a little about herself." He had been very chatty and seemed very proud of the graduate's and his own achievements in the past year. The caller felt comfortable about this arrangement and conducted the interview. Afterwards, she simply explained a little about herself--for example, being a parent of two grown children and her work at the university. Thus the interview was conducted in a reciprocal atmosphere.

General observations

On a number of occasions, parents initially refused to be interviewed until they had permission from the respective graduate. This meant waiting 1 to 3 weeks until they had reached the graduate; then we called them back to see if they had received permission to talk to us and be interviewed.

In several cases, although we had current addresses and the parents had given written consent to be interviewed, but when we phoned, the numbers were not current. In these situations, we always sent out another letter requesting a current telephone number. We always informed the families that we would protect the confidentiality of their numbers because most of these families had an unlisted/unpublished phone number.

We employed a diverse array of strategies to locate our subjects. It should also be noted that even in cases where we did have an accurate and up-to-date telephone number, we had to make numerous calls (sometimes 10 or more calls) to reach our interviewee. For example, one family was out of the country at the time of our data collection. We found this out only after making our 12th call, when a friend answered the phone and told us when the family would return.

Recommendations

Our first recommendation is that researchers begin projects with population samples that are accessible and whose addresses and phone numbers are current. This particular longitudinal study needed to "go back in time" to 1985 class graduation lists, providing a challenge to the data collectors. It is also suggested that if school districts did follow-up studies of their graduates, they would be able to see more immediately the outcomes of their programs. These data would serve as an evidential foundation from which to maintain programs that work or modify programs to insure the quality of life of high school graduates.

Second, in conducting longitudinal studies, we found it essential to receive from the respondents the name and telephone number of someone who would "always know where you are, and be willing to let us know." In our study in a number of cases the contact person insisted on not giving out our respondent's phone number. The data collector needs to strongly urge the respondent to let the "contact person" know that they have given out their name and phone number. We also suggest that the names and phone numbers of two contact persons be obtained.

Third, we recommend that data collectors be trained to be sensitive to a variety of responses and encouraged to let the data collection supervisor know of any unusual circumstances on a daily basis. For example, in the third year of our study a "no, I can't" response in four situations turned out not to be a refusal, but simply "no, I can't now." Weekly meetings to review progress and update procedures as needed is highly recommended.

We strongly urged our callers to speak with the same respondent as in the previous year. However, that was not always possible. Therefore, our fourth recommendation is that in studies where it is feasible, be willing to change to another "family informant." We only switched to another respondent who knew the current life situation of the graduate, and we maintained distinct codes to differentiate respondents and their relation to the subject (graduate).

Conclusion

The positive efforts in locating and retaining our subject informants are demonstrated in the relatively low attrition rates from year to year of contact (Year 2 at 6% of Year 1's N; Year 3 at 3%; Year 4 at 1.5%; and Year 5, 1%), and the attrition rate of 11.5%* between Year 1 (contact N=695) and Year 5 (contact N=615) of our study. Thus we found that it was a strong sense of commitment and perseverance that played the vital role in our endeavor to locate subjects throughout the life of the project.

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*The 11.5% attrition rate includes attrition by death (n=4) and refusals (n=27) after an initial Year 1 interview had been conducted.

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Table 1

Status of Mailing and Return or No-Return of Consent Letters to and from the Parents and Guardians of the 1985 and 1990 Cohorts (for Year 1 start-up).

	1985 N=632		1990 N=466	
	Total	%	Total	%
YES (Consent)	95	15	97	21
NO (No consent)	53	8	43	9
RETURNED TO US AS UNDELIVERED	118	19	14	3
NO LETTER RETURNED	366	58	312	67

Table 2

Sample Retention Over Time

Study Sample	**Year 1 Sample**	**Year 2 Sample**	**Year 3 Sample**	**Year 4 Sample**	**Year 5 Sample**
1985 Cohort N=632	N=351	N=330	N=317	N=311	N=307
	56% of original N	52% of original N	50% of original N	49% of original N	49% of original N
		94 % of Year 1 N	96% of Year 2 N	98% of Year 3 N	87% of Year 1 N
					99% of Year 4 N
1990 Cohort N=466	N=344	N=324	N=317	N=312	N=308
	74% of original N	70% of original N	68% of original N	67% of original N	66% of original N
		94% of Year 1 N	97% of Year 2 N	98% of Year 3 N	90% of Year 1 N
					99% of Year 4 N

Table 3

Status of disconnected and wrong numbers encountered in Year 1, and how many we reached (whether interviewed or refused)

	Number of DIS/WN	Numbers Found & %	
1985	N	N	%
School District A	140	25	18
School District B	55	8	14
School District C	42	4	9
1990			
School District A	58	17	29
School District B	25	7	28
School District C	8	4	50

Table 4

Status of disconnected and wrong numbers encountered in Year 2 for research sample and manner in which the current phone numbers were found.

	DIS/WN Numbers	Numbers Found	
	N	N	%
1985 Cohort	17	12	71
1990 Cohort	28	14	50
Totals	45	26	58

	How the numbers found N=26 Total	%
Via the "contact person"	17	65
Via directory assistance	4	15
Via letters sent out to request new number	5	19

Table 5

Status of disconnected and wrong numbers encountered in Year 3 for research sample and manner in which current phone numbers for subjects were found.

	DIS/WN Numbers	Numbers Found	
	N	N	%
1985 Cohort	24	16	67
1990 Cohort	24	20	83
Totals	48	36	75

How the numbers found

N=36

	Total	%
Via the "contact person"	15	42
Via directory assistance	13	36
Via letters sent out to request new number	8	22

Table 6

Status of disconnected and wrong numbers encountered in Year 4 for research sample and manner in which current phone numbers for subjects were found.

	DIS/WN Numbers	Numbers Found	
	N	N	%
1985 Cohort	21	16	76
1990 Cohort	26	23	88
Totals	47	39	83

How the numbers found

	N=39 Total	%
Via the "contact person"	36	92
Via directory assistance	2	5
Via letters sent out to request new number	1	3

Table 7

Status of disconnected and wrong numbers encountered in Year 5 for research sample and manner in which current phone numbers for subjects were found.

	DIS/WN Numbers	Numbers Found	
	N	N	%
1985 Cohort	13	12	92
1990 Cohort	21	18	86
Totals	34	30	88

	How the numbers found	
	N=30	
	Total	%
Via the "contact person"	20	67
Via directory assistance	5	17
Via letters sent out to request new number	5	17